Appendix A. Plan Contributors

Name	Affiliation	Area of Expertise
	Department of Conservation and Recreation	
Abrahams, Michael	Chief Financial Officer	Capital budgeting
Backman, Andy	Director of Regional Planning	Natural resources
Baecker, Jim	Regional Planner	RMP Coordination
Bailey, Colleen	Water Supply Protection	Flood Mapping
Berkland, Ellen	Archaeologist	Archaeological Resources
Brown, Maggi	Park Ranger	Interpretive Services
Brown, Stephen	Special Project Coordinator	Energy efficiency
Corsi, Rick	Charles River Basin Planner	Park planning and design
Cyr, Stephen	Rivers District Manager	Park operations
Dowd, Mark	Ranger Boat Patrols	Ranger services
Driscoll, Dan	Upper Charles River Greenway Planner	Recreation planning
Fiesinger, Anne	Office of External Affairs and Partnerships	Public outreach
Fisher, Sean	Archivist, Office of Cultural Resources	Agency history
Geer, Russ	Park Ranger	Ranger services
Gode, Bill	Flood Control and Navigational Operations	Dam operations
Gove, Nick	Boston Regional Director	Park operations
Greene, Judy	Plans Archivist, Office of Cultural Resources	Agency history
Haglund, Karl	Charles River New Basin Project Manager	Park history and design
Harris, Jeffrey	Preservation Planner	Historic resources
Helfeld, Ruth	Landscape Architect	Landscape design
Hunt, Daniel	Director of Government Affairs	Legislative relations
Jahnige, Paul	Greenways and Trails Program	Recreation
Jones, Yvonne	Electrical systems Section Head	Street and park lighting
Karl-Carnahan, Kristin	Chief of Interpretive Services	Interpretive services
Kirwin, Ken	Traffic Engineer	Traffic planning
Lenhardt, Dave	Bridge Engineer	Bridge engineering
Lowell, Rob	Bureau of Engineering	Storm water management
McCarthy, Tom	Universal Access Program	Universal access
Moran, Barbara	External Affairs	Web content
Orfant, Joe	Bureau of Planning and Resource Protection	Park planning
Overton, Samantha	Assistant Director State Parks	Park operations
Paine, Cathy	Regional Engineer	Infrastructure
Pfetsch, Robin	Director of Architectural Services	Building design and construction
Plocinski, Loni	GIS Programming	GIS and planning
Putnam, Nancy	Ecologist	Natural resources
Roche, Janice	Special Event Permits	Special events
Salomaa, William	Dam Safety Program	Dam infrastructure
Scapicchio, Stephen	Revenue Director	Park revenues
Silva, Raul	Deputy Chief Engineer	Civil engineeing
Soroka, Val	Engineering	Electrical engineering
Thurlow, Matt	Landscape Architect	Playground and park maintenance
Tilas, Angelo	Esplanade-New Charles River Basin Supervisor	Park operations
Yule, Fred	Director of Mobile Maintenance	Park maintenance
Winter, Kathy	Special Event Permits	Special events
Woodward, Emily	Real Estate Permits and Lease Program	Special use permits and leases
Zingarelli, Richard	Water Supply Protection	Flood Control

Appendix A. Plan Contributors (Continued)

Name	Affiliation	Area of Expertise
	Other Affiliations	
Chase, Brad	Massachusetts Division of Marine Fisheries	Aquatic Biologist
Cianciola, Elisabeth	Charles River Watershed Association	Aquatic Scientist
Fichter, Kate	The Esplanade Association	Transportation planning
French, Thomas W.	Natural Heritage and Endangered Species Program	Rare species
Harper, Lynn	Natural Heritage and Endangered Species Program	Rare species, MESA compliance
Newman, Margo	The Esplanade Association	Park planning
Shields, John	Shields Design	Architecture, Urban Design

Appendix B. Public Participation

In accordance with M.G.L. Chapter 21: Section 2F, the Resource Management Plan (RMP) for the Charles River Esplanade - New Basin Complex was developed in conjunction with a public participation process to ensure that interested stakeholders and individuals had an opportunity to review the draft RMP and offer input in its development. This appendix identifies the public participation process used to inform and review this RMP.

1. Input into Development of the RMP

Public input into the development of the Charles River Esplanade - New Basin Complex RMP began with an initial public meeting at the Shriners Hospital for Children Auditorium, Boston on October 10, 2013. Notice of the public meeting and of the DCR's intent to prepare a Resource Management Plan for the Complex was announced on the DCR webpage, in the September 25, 2013 Environmental Monitor and through meeting notices provided to area media. Meeting notices were also sent to stakeholders and individuals on the Charles River Esplande - New Basin mailing list.

Approximately 22 people attended this meeting, which ran from 6:30 to 8:30 p.m. At the the meeting, the public was invited to ask questions and engage in a dialogue on issues that should be addressed in the RMP. Notes from the question and answer session were recorded and posted publicly at http://www.mass.gov/eea/agencies/dcr/ public-outreach/public-meetings/.

Written input on the plan was also was also solicited at the initial public meeting, in the Environmental Monitor announcement, on the DCR webpage and in meeting notices sent to individuals and organizations on the Charles River Esplanade-New Basin RMP contact list. Public input on issues that should be addressed in the plan was received at the meeting and through two written comments received after the meeting.

2. Public Comment on the Draft RMP

Notice of a second public meeting to present the draft RMP for the Charles River-New Basin Complex, and of the availability of the plan, was published in the August 27, 2014 Environmental Monitor, through a meeting notice sent to area media outlets, in notices sent to individuals and organizations on the Charles River Esplanade-New Basin contact list, and on the DCR webpage. The meeting was held on September 18, 2014 at the Shriners Hospital for Children Auditorium; approximately 28 people attended.

A public comment period on the draft RMP ran from September 18 through October 31, 2014. During this period, the DCR recieved eleven written comments. These written comments were posted at http://www.mass.gov/eea/agencies/dcr/public-outreach/public-meetings/.

3. Changes to the Final RMP

All comments received during the final public comment period have been reviewed, compiled and considered. Comments that were consistent with the DCR's mission and policies, Massachusetts' laws and regulations, and the Management Principle and Goals of the complex were carefully considered for incorporation into the final RMP. Changes to the final RMP in response to these public comments are described below.

Section 1.5. Management Principle & Goals

"Separate footpaths and bike paths" was added to the goals for the Boston Esplanade.

"Runnng and jogging" were added to the goal for the New Basin pathways.

Section 2.1. Natural Resources

Water Quality. The impared waterway section was updated:

Under current EPA and Mass DEP Section 303(d) regulations, the Lower Charles River Basin from the Boston University Bridge to the New Charles River Dam is designated as an impaired waterway due to excessive concentrations of total phosphorous, Chlorophyll-a, nutrient/eutrophication biological indicators, excess algal growth, secchi disk transparency, taste and odor (DEP, 2014).

Technical comments provided by an Aquatic Scientist with the Charles River Watershed Association were incorporated into the water quality, fish community and wildlife sections.

Section 2.3. Recreation Resources

Community Boating. The description of the Community Boating boathouse was revised to:

The boathouse is a two-story building with a lobby, boat garage, storage and dressing rooms on the first floor. The second floor, added in 1987, has a large community room and several offices. DCR is responsible for major repairs to the boathouse and docks. In 2011, the Community Boating wooden docks were completely replaced. The Esplanade Association raised $335,000 toward the $2.8 million project. The boathouse has a non-operational elevator for second floor access, a 27-year old leaky roof, and deteriorating brick exterior.

Charles River Skate Park. The description of the Charles River Skate Park was updated to:

The Charles River Conservancy has begun construction of a 40,000 square foot skate park on the northern part of North Point Park under the I-93 highway ramps. The skate park is designed to provide four tiers of difficulty for skateboarders, BMX riders and inline skaters. The skate park will have seating for spectators and the capacity to support community clinics and events, as well as competitions. The Conservancy raised $4.5 million to remediate the contaminated site, design, permit and construct the skateboard park.

Private funding included a $1.5 million donation from Vans, which plans on hosting two skating events per year at the park, an $800,000 donation from the Lynch Foundation, $1.75 million raised from various donors and $450,000 in public funds. The public funding includes $100,000 from the Boston Redevelopment Authority, $200,000 from the City of Cambridge and $150,000 in state funding. DCR will operate and maintain the completed skate park. Vans has agreed to donate $25,000 annually to DCR for skate park maintenance.

Section 3.7. Partnerships

Music Oval. The Music Oval restoration project description was updated to:

In October 2014, TEA began renovation of the Hatch Shell Oval lawn. The project will create a healthy stand of lawn with irrigation in the Hatch Shell Oval that can better withstand high use and improve the infrastructure for music and video performances at the Hatch Shell. Restoration of the Music Oval includes amending existing soils, adding an irrigation system, improving subsurface drainage and installation of underground audiovisual conduits. The estimated cost of the project is $600,000. The lawn is expected to reopen in early summer of 2015, in time for Fourth of July festivities (TEA, 2014).

Charles River Watershed Association. The following paragraph was added to the Charles River Watershed Association description:

The CRWA has contributed to safe recreational use of the Charles River through its active involvement in the development of federally-mandated pathogen and phosphorus management plans, volunteer data collection that supports EPA's Water Quality Report Card program for the Charles River, and a notification program that informs the public of unsafe water quality conditions. The CRWA also assists the U. S. Fish and Wildlife Service's shad stocking program and hosts an annual river clean-up, which engages between 2,500 and 4,000 volunteers throughout the Charles River watershed each year.

Section 4.3. Management Recommendations

The following recommendations were modified in Table 22:

Improve River Water Quality

Stormwater Management. 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).

Vegetative Riparian Buffers. 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 ground water table; restrict the ability of geese to move between water and lawn without flying; and absorb sediments and nutrients before they enter the River.

Aquatic Invasive Plants and Animals. Monitor and manage aquatic invasive plants and animals (e.g., water chestnut, fanwort, Eurasian water milfoil,

zebra mussels) that can colonize shallow areas along the river's banks.

Enhance the Native Landscape

Invasive Plant Management. 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.

Canada Geese Management. 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.

Provide Contemporary Recreation Facilities on the Boston Esplanade

Landscape Management Plan. Work with The Eesplanade Association to develop and implement a comprehensive ecologically sustainable landscape management plan for the Lower Basin.

Separate Bike and Pedestrian Paths. 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.

Uniform Signage system. 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 bicycle and pedestrian connectivity.

Street Lighting. Replace deteriorated Storrow Drive and Embankment Road street lighting with historic LED lighting.

Interpretive Master Plan. Work with stakeholder organizations to develop an interpretive master plan for the Complex including recommended themes, interpretive signage, program descriptions and staff requirements.

Boston Esplanade Lagoons. Restore the Boston Esplanade lagoons, canoe-way, bridges and banks. Improve lawns for vistor uses that are appropriate to the park and the river setting.

Hatch Shell. Work with The Esplanade Association and other interested parties (e.g., Boston Landmarks Orchestra) to understand performance needs, develop a design for improved performance lighting, sound and video systems at the Hatch Shell, and discuss appropriate funding structure.

Fountain and Memorial Repairs. Work with The Esplanade Association to restore the Lotta Fountain and Oliver Wendell Holmes Memorial.

Boat Haven. Work with Community Boating to repair the boathouse roof and exterior masonry, and install a lift to provide ADA access to the second floor.

Lee Pool Area. 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.

Complete the New Basin Parks and Pathways

Old Lock Area. 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.

Seek a private tenant under the DCR Historic Curatorship Program for the Upper Lock Gate House to renovate the building for use as a welcome center with visitor services and a food concession with outdoor seating.

Science Park. Seek legislative authorization to include the historic Upper Lock Gate House, Boat House and Stable buildings in the DCR Historic Curatorship Program.

Seek a public boating program to lease and renovate the historic Boat House and Stable buildings under DCR's Historic Curatorship Program.

Work with the Museum of Science to provide public access to the river along the upstream side of Science Park from the Cambridge Esplanade to the

Boston Esplanade with an at-grade connection to the Land Boulevard sidewalk.

Establish First Rate Management Systems

Lease Agreements. Conduct a review of the annual fees currently in place for leases, licenses, permits and agreements with non-profit or private tenants. Work with each tenant to bring their annual payment in line with fair market value by 2018 and provide amenities for park users (e.g., restrooms and drinking fountains).

Appendix C. Overview of Coordination Process with the Massachusetts Natural Heritage and Endangered Species Program (NHESP)

1. BACKGROUND

Since its inception, DCR's Resource Management Planning Program has actively sought and applied the expertise of the NHESP. In 2006, the NHESP and DCR established the Biodiversity Stewardship Project. The main purposes of this project were to:

- Develop a process by which the two agencies would work together to facilitate NHESP delivery of biodiversity information and provision of management recommendations for RMPs; and
- Guide DCR land managers in the on-site management of rare species habitat.

Between 2006 and 2008 the NHESP prepared 10 biodiversity assessments covering 17 DCR properties (Table C.1). Information from available biodiversity assessments has informed the Existing Conditions and Recommendations sections of RMPs already adopted by the DCR Stewardship Council and has resulted in appropriate management recommendations for rare species. Information from the remaining biodiversity assessments will be used to inform future RMPs. The NHESP continues to provide guidance to the RMP Program, and in 2009 and 2012 DCR and NHESP worked together to identify the actual and potential impacts of DCR's trails and trail maintenance activities on rare species and their habitats. In addition, the NHESP informs and reviews RMPs on an ongoing basis.

Table C.1. NHESP biodiversity assessments and reports prepared for the Resource Management Planning Program.

Report Title	Date
Biodiversity Stewardship Initiative: biodiversity data products and technical assistance for managing Massachusetts' forests, parks & reservations. Final report of the FY06 pilot project. [Includes Horseneck Beach State Reservation and Mohawk Trail State Forest]	2006
Biodiversity of Blue Hills Reservation	2007
Biodiversity of J. A. Skinner and Holyoke Range state parks	2007
Biodiversity of Mt. Tom State Reservation and adjacent conservation lands	2007
Biodiversity of Mt. Sugarloaf State Reservation	2007
Biodiversity of Myles Standish State Forest	2007
Biodiversity of Lower Spectacle Pond, Sandisfield	2008
Biodiversity of Nickerson State Park and Hawksnest State Park	2008
Biodiversity of Bash Bish Falls State Park, Jug End State Reservation, Mt. Everett State Reservation, and Mt. Washington State Forest	2008
Biodiversity of Gilbert A. Bliss State Forest	2008
Recreational trail maintenance and biodiversity conservation. June 30, 2009	2009
Middlesex Fells Reservation: field surveys 2011. Prepared by the NHESP for Massachusetts Department of Conservation and Recreation. June 30, 2011	2011
Recreational trail maintenance and biodiversity conservation: select DCR urban parks. July 30, 2012.	2012

Appendix C. Overview of Coordination Process with the Massachusetts Natural Heritage and Endangered Species Program (NHESP) (Continued)

2. ONGOING COORDINATION AND REVIEW

The DCR follows a standard approach to coordinate the preparation and review of RMPs with the NHESP. This approach may be modified in response to the particular circumstances associated with each RMP. This approach includes:

- **Staff Coordination.** The NHESP has designated an official point of contact for RMPs and it is through this contact that all subsequent interaction with NHESP is coordinated.
- **Advance Notice.** DCR provides NHESP with a list of current and upcoming RMPs.
- **Data Request.** Up to date information is formally requested by DCR at the start of the planning process.
- **Consultation.** Informal consultation regarding interpretation of data provided by the NHESP may occur following NHESP's response to data request.
- **Application of Other NHESP Data.** Information and recommendations contained in biodiversity assessments, if applicable, are incorporated into the draft RMP early in the writing process.
- **Formal Draft RMP Submission to NHESP.** The draft RMP is submitted to the NHESP for formal review under the Massachusetts Endangered Species Act (MESA). This is done before a draft plan is released to the public.
- **Response to Comments.** NHESP provides comment letters on the draft RMP that distinguish between what must be done (i.e., actions required for compliance under MESA) and additional actions that may be taken to enhance rare species populations and habitats. As a rule, both types of recommendations are added to the revised draft. (***Note***: because the NHESP's recommendations are incorporated into RMPs, each RMP contains a *de facto* management strategy and guidance for all state-listed species within a planning unit.)
- **Additional Coordination**. The NHESP is frequently consulted, in their roles as both regulator and subject matter expert, to discuss other (i.e., non-NHESP) rare species-related comments.

3. COORDINATION AND REVIEW FOR THIS RMP.

Coordination with the NHESP began prior to the official start of work on the RMP and continued through review of the internal draft RMP.

- **June, 2012.** DCR submitted a MESA Information Request Fom requesting rare species and natural communities data for the Charles River basin from Boston Harbor to theWatertown Dam.
- **July, 2012.** In response to the MESA Information Request, the NHESP responded that "*there are no rare species with current habitat and no natural communities mapped on the property."*
- **July, 2014.** The NHESP was provided an internal review draft of the RMP. NHESP provided comments on the draft RMP on July 11, 2014. A copy of the NHESP's comment letter on the draft plan is included in this appendix.

Commonwealth of Massachusetts

Division of Fisheries & Wildlife

Wayne F. MacCallum, *Director*

July 11, 2014

James Baecker
Office of Regional Planning
Massachusetts Department of Conservation and Recreation
251 Causeway Street, Suite 700
Boston, MA 02114

RE: Draft *Charles River Esplanade – New Basin Complex Resource Management Plan*

Dear Mr. Baecker:

The Massachusetts Natural Heritage & Endangered Species Program (NHESP) is pleased to offer comments on the July, 2014, draft of the *Charles River Esplanade – New Basin Complex Resource Management Plan.* We support the Resource Management Plan as written, and we especially appreciate DCR's attention to environmental and biodiversity issues in this heavily urbanized site.

As of this writing, NHESP has no documented current records of MESA-listed species, Priority Natural Communities, or Certified Vernal Pools on this site. We note, however, that the Charles River is *BioMap2* Aquatic Core here, largely for the anadromous fish using the river.

4.1 Landscape Designation
Page 72: NHESP agrees with DCR's designation of DCR properties within the Charles River Esplanade – New Basin Complex as Parkland.

4.2 Land Stewardship Zoning
Page 73: NHESP agrees with DCR's recommendations for designation of the entire complex as Zone 3.

Table 21: Recommendations for the Charles River Esplanade – New Basin Complex
Pages 74-78: NHESP agrees with DCR's recommendations for the Complex.

Thank you for allowing NHESP the opportunity to comment on the draft Resource Management Plan. If you have any questions regarding our comments, please contact Lynn Harper, Habitat Protection Specialist, in our West Boylston office at 508-389-6351.

Sincerely,

Thomas W. French

Thomas W. French, Ph.D.
Assistant Director
Natural Heritage & Endangered Species Program

Appendix D. Planting Lists[1]

Plants within the Charles River Basin serve a wide spectrum of needs, including:

- enhancing park areas and framing open space
- strengthening the parkway character of roads
- embellishing structures
- framing or screening views as needed
- providing shade
- facilitating maintenance
- directing use

These plant lists are intended to build on the palette of plants that exists within the Basin, increasing diversity while maintaining species that are performing well in the landscape. Specific design plans will be needed throughout the parkland, parkways and riverbanks to address particular improvements and to ensure that the right plant is used in the right place and manner.

Charles Eliot intended that the landscape development of the Charles River Reservation give preference to native plants, but that nonnatives or exotics that blended visually into the landscape be included as well. These lists reflect that design intent.

The following lists, while extensive, are not comprehensive. They provide a range of choices that reflect the design intentions of the original plan and the current master plan. They will serve as the basis for further development and refinement of plant use in the Charles River landscape.

The plant lists are organized by zones within the Charles River Basin:

1. Parkway Plants
2. Riverbank Plants
3. Parkland Plants

The lists have been generated from several sources, including master plan consultants The Halvorson Company; horticulturist Paul Rogers; Rizzo Associates; and the plant list for North Point Park of Oehme and van Sweden/Carr, Lynch, Hack and Sandell.

Some species currently in use along the Basin have been eliminated from the lists because of disease problems, lack of hardiness, or problems with form and intended function.

Parkway Plants

Trees in the *Parkway* list include species that currently are performing well along the Basin's roads, as well as additional species that satisfy the two primary requirements for parkway planting: hardiness to withstand the stresses of the roadside environment, and a form that provides at maturity a canopy over the parkway. Other plants in the Parkway list refer to median/rotary shrubs and ornamental plantings at key gateway and transition points.

Riverbank Plants

Tree, shrub and perennial species in the *Riverbank* list are broken down in two ways: by soil-moisture requirements and by projected height of plant. The height designation will be used to design riverbank compositions that satisfy the needs for views, screening, height variability, and other visual criteria.

The moisture-requirements designation identifies species by potential bank locations, or in terms of elevation relative to the mean water height. The *Middle to Upper Bank* zone applies to banks higher than six feet above the mean water level. Species recommended for this zone are upland plants that prefer dry or typical upland soil conditions. *Lower Bank* is lies between six and two feet above the mean high-water level.

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1. Source: Master Plan for the Charles River Basin, 2002.

Species in this zone live just up-slope of a wetland, prefer moist soil, and are inundated less than 10% of the time. *River Edge* species prefer wet soil and can accommodate periodic inundation.

Many of the woody Riverbank species listed are suitable for planting only as container-grown stock, not as live brush/live stake cuttings. Species suitable for installation as live cuttings are marked with an asterisk (*). Wide variation in success rates of live brush exist among "suitable" species. Willows and various dogwoods are the most reliable performers; all other species have shown mixed results.

Parkland Plants

Parkland plants include trees, shrubs, and flowers for meadow use, and bulbs for embellishment of selected areas. Cherry trees are not listed, since the MDC has been receiving an abundant supply from the Japanese government. The use of this species should be limited in the future, because of the large number of specimens already in place. Other flowering understory trees are proposed below to diversify the landscape.

Plants on the Parkway and some of the Riverbank lists should also be considered appropriate for the Parkland Plants list.

PARKWAY PLANTS

A. Trees

- pin oak (*Quercus palustris*)
- red oak (*Quercus rubra*)
- scarlet oak (*Quercus coccinea*)
- swamp white oak (*Quercus bicolor*)
- red maple (*Acer rubrum*) (not grafted)
- lacebark elm (*Ulmus parviflora*)
- London planetree (*Platanus x acerifolia*)
- silver linden (*Tilia tomentosa*)
- Japanese pagoda tree (*Sophora japonica*)

B. Shrubs

- dwarf Annabelle hydrangea (*Hydrangea arborescens* 'Annabelle')
- Japanese spiraea (*Spiraea japonica* 'alpina,' 'Gold Flame,' Gold Mound,' Magic Carpet,' 'Little Princess')
- Anthony Waterer spiraea (*Spiraea bumalda* 'Anthony Waterer')
- quince (*Chaenomeles*)
- sweetfern (*Comptonia*)
- red osier dogwood (*Cornus sericea* 'Kelseyi')
- slender deutzia (*Deutzia*)
- dwarf fothergilla (*Fothergilla gardenii*)
- St. Johnswort (*Hypericum*)
- Japanese holly (*Ilex crenata* 'Green Luster')
- sweetspire (*Itea*)
- globe flower (*Kerria*)
- cinquefoil (*Potentilla var.*)
- yew (*Taxus var.*)
- lowbush blueberry (*Vaccinium angustifolium*)
- dwarf European cranberrybush (*Viburnum opulus nanum*)
- bayberry (*Myrica pensylvanica*)
- crispa cutleaf Stephanandra (*Stephanandra* 'Crispa')

C. Ornamental Grasses and Bamboo

- feather reed grass (*Calamagrotis acutiflora stricta*)
- dropping sedge (*Carex pendula*)
- sea oats/wild oats (*Chasmanthium latifolium*)
- tufted hair grass (*Deschampsia cespitosa*)
- blue clump bamboo (*Fargesia nitida*)
- Hakone grass (*Hakonechloa macra*)
- Japanese blood grass (*Imperata* 'Red Baron')
- red maiden grass (*Miscanthus purpurascens*)
- maiden grass (*Miscanthus sinensis* 'Malepartus')
- tall purple moor grass (*Molinia caerulea arundinacea* 'Windspiel')
- red switch grass (*Panicum virgatum*)
- fountain grass (*Pennisetum alopecuroides*)
- silver spike grass (*Spodiopogon sibiricus*)
- ribbon grass (*Phalaris arundinacea picta*)

Appendix D. Planting Lists (Continued)

RIVERBANK PLANTS

A. TREES

A1. River-Edge Trees

- alder species (*Alnus*)*
- red maple
- speckled alder*
- common alder*
- serviceberry
- river birch
- American hornbeam
- eastern larch
- black tupelo
- swamp white oak
- cottonwood*
- white willow*
- corkscrew willow*
- black willow (*Salix nigra*)*
- silver maple (*Acer sacharrinum*)
- american basswood (*Tilia americana*)
- white pine (*Pinus strobus*)
- Atlantic or Eastern white cedar (*Chamaecyparis thyoides*)
- Allegany serviceberry (*Amelanchier laevis*)

A2. Lower- to Middle-Bank Trees:

Same as River Edge Trees, with these additions:

- sweet gum (*Liquidambar styraciflua*)
- sweet bay (*Magnolia virginiana*)

* SPECIES SUITABLE FOR INSTALLATION AS LIVE CUTTINGS.

- American arborvitae (*Thuja occidentalis*) (many fared poorly in April 1997 blizzard)
- amur maple (*Acer ginnala*)
- katsuratree (*Cercidiphyllum japonicum*)
- tartarian dogwood
- tulip-tree (*Liriodendron tulipifera*)
- black spruce (*Picea mariana*)
- mountain ash (*Sorbus*)
- Japanese dogwood (*Cornus kousa*)
- pagoda dogwood (*Cornus alternifolia*)
- cornelian cherry (*Cornus mas*)
- eastern redbud (*Cercis canadensis*)
- snowdrop tree (*Halesia caroliniana*)
- yellowwood (*Cladastrus lutea*)
- Korean stewartia (*Stewartia koreana*)
- star magnolia (*Magnolia stellata*)
- paper birch (*Betula papyrifera*)
- sweet birch (*Betula nigra*)
- yellow birch (*Betula alleganiensis*)
- pin oak (*Quercus palustris*)
- American hop hornbeam (*Ostrya virginiana*)
- sourwood (*Oxydendron arboreum*)
- holly varieties (*Ilex x meserveae*)
- witch hazel (*hamamelis virginiana*)
- sassafras (*Sassafras albidum*)
- Eastern hemlock (*Tsuga canadensis*)

A3. Middle- to Upper-Bank/Top-of-Bank Trees:

Same as Lower-Bank Trees, with these additions:

- sugar maple (*Acer saccharum*)
- red oak (*Quercus rubra*)
- white oak (*Quercus alba*)
- black locust (*Robinia pseudoacacia*)
- common hackberry (*Celtis occidentalis*)
- Eastern red cedar (Juniperus virginiana)

B. SHRUBS

B1. River-Edge Shrubs

(2'–3' height approx.)

- broad-leaf meadowsweet (*Spiraea latifolia*)
- steeplebush (*Spiraea tomentosa*)
- maleberry (*Gaylussacia baccata*)
- box huckleberry (*Gaylussacia brachysera*)
- sheep-laurel (*Kalmia angustifolia*)
- swamp rose (*Rosa palustris*)

(3'–4' height approx.)

- fothergilla (*Fothergilla major*)
- swamp azalea (*Rhododendron viscosum*)
- sweet azalea (*Rhododendron arborescens*)
- purple osier or streamco willow (*Salix purpurea*)*
- buttonbush (*Cephalanthus occidentalis*)*
- banker's dwarf willow (*Salix* x *cotteti*)*

(4'–6' height approx.)

- Virginia sweetspire (*Itea virginica* 'Henry's Garnet') (4')
- American cranberry (*Vaccinium macrocarpon*)
- arrowwood viburnum (*Viburnum dentatum* or *recognitum*)*
- winterberry (*Ilex verticillata*)
- sparkleberry (*Ilex verticillata* 'Sparkleberry' or 'Winter Red')
- St. Johnswort (*Hypericum densiflorum*)

Appendix D. Planting Lists (Continued)

(6'–8' height approx.)

- red osier dogwood (*Cornus sericea* or *stolonifera*)*
- silky dogwood (*Cornus amomum*)*
- gray dogwood (*Cornus racemosa*)*
- pussy willow (*Salix discolor*)*
- highbush blueberry (*Vaccinium corymbosum*)*

(8'–10' height approx.)

- spicebush (*Lindera benzoin*)
- elderberry (*Sambucus canadensis*)*
- red chokeberry (*Aronia Arbutifolia*)
- summersweet (*Clethra alnifolia*)*

B2. Lower- to Middle-Bank Shrubs

Many of those listed above and these additions

(2'–3' height)

- sweetfern (*Comptonia peregrina*) (2')
- Eastern leatherwood (*Dirca palustris*) (2'–3')

(3' height)

- blackberry (*Rubus species*)
- raspberry (*Rubus pubescens*)
- dewberry (*Rubus enslenii*)
- thimbleberry (*Rubus odoratus*)
- Virginia rose (*Rosa virginiana*)
- shining rose (*Rosa nitida*)
- Carolina rose (*Rosa carolina*)

(4'–6' height)

- andromeda species (*Pieris species*) (4')
- American cranberrybush (*Viburnum*

(8'–10' height)

- Carolina allspice (*Calycanthus floridus*)
- enkianthus (*Enkianthus campanulatus*)
- bayberry (*Myrica pennsylvanica*)
- witherod or wild raisin (*Viburnum cassinoides*)*
- nannyberry (*Viburnum lentago*)*
- blackhaw (*Viburnum prunifolium*)*
- mountain Laurel (*Kalmia latifolia*)

(12'–14' height)

- hybrid witchhazel (*Hamamelis* x *intermedia*)

(16'–20' height)

- rosebay rhododendron (*Rhododendron maximum*)

B.3 Middle- to Upper-Bank/Top-of-Bank Shrubs

Many of those listed for Lower- to Middle-Bank Shrubs and these additions:

(2' height)

- lowbush blueberry (*Vaccinium ovatum*)

(3' height)

- bush cinquefoil (*Potentilla fruticosa*)

(4' height)

- inkberry (*Ilex glabra*)
- common juniper (*Juniperus communis*)
- American hazelnut (*Corylus americana*)

(6' height)

- butterfly bush (*buddleia species*)

C. Groundcovers

C1. Lower-Bank to Top-of-Bank Groundcovers

- Bugleweed (*Ajuga repens*)
- Canada anemone (*Anemone canadensis*)
- groundnut-vine (*Apios americana*)
- Eastern wild ginger (*Asarum canadense*)
- European wild ginger (*Asarum europaeum*)
- goldenstar (*Chrysogonum virginianum*)
- bunchberry (*Cornus canadensis*)
- bishop's-hat (*Epimedium grandiflorum*)
- Eastern trout lily (*Erythronium americanum*)
- wintercreeper-vine (*Euonymous fortunei*)
- barren-strawberry (*Waldsteinia fragarioides*)
- English ivy-vine (*Hedera helix*)
- creeping juniper (*Juniperus horizontalis*)
- coast leucothoe (*Leucothoe axillaris*)
- Oregongrape (*Mahonia aquifolium*)
- wild lily-of-the-valley (*Maianthemum canadense*)
- partridgeberry (*Mitchella repens*)
- Virginia creeper-vine (*Parthenocissus quinquefolia*)
- Solomon's seal (*Polygonatum biflorum*)
- false Solomon's Seal (*Smilacina racemosa*)
- foamflower (*Tiarella cordifolia*)
- periwinkle-vine (*Vinca minor*)
- common blue violet (*Viola papilionacea*)

Appendix D. Planting Lists (Continued)

D. Perennials/Wetland Plants

D1. River-Edge & Emergent Perennial and Wetland Plants

- water plantain (*Alisma plantago-aquatica*)
- blue flag iris (*iris versicolor*)
- European iris (*iris pseudocorus*)
- spikerush (*Eleocharis palustris*)
- sweet flag (*Acorus calamus*)
- marsh marigold (*Caltha palustris*)
- cardinal flower (*Lobelia cardinalis*)
- blue lobelia (*Lobelia siphilitica*)
- monkey flower (*Mimulus ringens*)
- monkey musk (*Mimulus guttatus*)
- arrow arum (*Peltandra virginica*)
- pickerelweed (*Pontedaria cordata*)
- water dock (*Rumex orbiculatus*)
- arrowhead (*Sagittaria latifolia*)
- narrow-leaf cattail (*Typha angustifolia*)

Emergent grasses, sedges, rushes, bulrushes and reeds

- fringed sedge (*Carex crinita*)
- tussock sedge (*Carex stricta*)
- lurid sedge (*Carex lurida*)
- uptight sedge (*Carex stricta*)
- fox sedge (*Carex vulpinoides*)
- soft rush (*Juncus effusus*)
- Canada rush (*Juncus canadensis*)
- knotted rush (*Juncus nodosus*)
- soft-stem bulrush (*Scirpus validus*)
- river bulrush (*Scirpus fluviatilis*)
- hard-stem bulrush (*Scirpus acutus*)

Ferns

(4' height)

- royal fern (*Osmunda regalis*)
- interrupted fern (*Osmunda claytoniana*)
- ostrich fern (*Matteuccia struthiopteris*)
- cinnamon fern (*Osmunda cinnamomea*)
- marsh fern (*Dryopteris thelypteris* or *Thelypteris palustris*)

D2. Lower-Bank Perennials and Wetland Plants (2-4 feet above mean water level):

(4' height)

- queen-of-the-prairie (*Filipendula palmata* or *rubra*)

(6' height)

- cow parsley (*Angelica archangelica*)
- bugbane (*Cimicifuga racemosa*)
- boneset (*Eupatorium perfoliatum*)
- Joe-Pye weed (*Eupatorium maculatum*)
- bluestar or willow herb (*Amsonia tabernae-montana*)
- swamp milkweed (*Asclepias incarnata*)
- astilbe (*Astilbe species*)
- white turtlehead (*Chelone glabra*)
- red turtlehead (*Chelone lyoni*)
- closed gentian (*Gentiana andrewsii*)
- daylily (*Hemerocallis species*)
- hibiscus/mallow (*Hibiscus moscheutos*)
- rose mallow (*Hibiscus palustris*)
- hosta (*Hosta species*)
- spiderwort (*Tradescantia species*)
- globe flower (*Trollius laxus*)
- blue vervain (*verbena hastata*)

Lower-bank grasses:

- fowl meadow grass (*Poa palustris*)
- blue joint grass (*Calamagrostis canadensis*)
- fowl manna-grass (*Glyceria canadensis*)
- rice cutgrass (*Leersia oryzoides*)
- panic grass or switchgrass (*Panicum virgatum*)

D3. Middle- to Upper-Bank Perennials and Wetland Plants

May use standard wildflower seed or conservation mix:

- butterfly weed (*Asclepias tuberosa*)
- New England aster (*Aster novae-angliae*)
- lanceleaf coreopsis (*Coreopsis lanceolata*)
- orange hawkweed (*Heiracium aurantiacum*)
- blanket flower (*Gaillardia x grandiflora*)
- sea lavender (*Limonium nashii*)
- wild lupine (*Lupinus perennis*)
- wild bergamot (*Monarda fistulosa*)
- black-eyed Susan (*Rudbeckia species*)

Ferns

- lady fern (*Athyrium filix-femina*)
- Christmas fern (*Polystichum acrostichoides*)
- sensitive fern (*Onoclea sensibilis*)
- hay-scented fern (*Dennstaedtia punctilobula*)

PARKLAND PLANTS

A. Trees

A1. Canopy Trees:

Same as Parkway Trees and Middle-Upper Bank/Top of Bank Riverbank Trees, with these additions:

- common horsechestnut (*Aesculus hippocastanum* 'Baumannii')
- katsuratree (*Cercidiphyllum japonicum*)
- European beech (*Fagus sylvatica*)
- sourwood (*Oxydendrum arboreum*)
- paper birch (*Betula papyrifera*)
- river birch (*Betula nigra* 'Heritage')
- common hackberry (*Celtis occidentalis*)
- rosemary willow/hoary willow (*Salix elaegnos*)
- black willow (*Salix nigra*)
- Crimean linden (*Tilia x euchlora*)
- littleleaf linden (*Tilia cordata*)
- American basswood (*Tilia americana*)
- Amur maackia (*Maackia amurensis*)
- tulip-tree (*Liriodendron tulipifera*)
- ginkgo (*Ginkgo biloba*)
- mountain-ash (*Sorbus*)
- hornbeam (*Carpinus*)
- shagbark hickory (*Carya ovata*)

A2. Evergreen Trees

- lacebark pine (*Pinus bungeana*)
- jack pine (*Pinus banksiana*)
- white pine (*Pinus strobus*)
- white fir (*Abies concolor*)
- fraser balsam fir (*Abies fraseri*)
- chamaecyparis (*Chamaecyparis* var.)
- Canada hemlock (*Tsuga canadensis*)
- Carolina hemlock (*Tsuga caroliniana*)

A3. Flowering Trees

- shadblow serviceberry (*Amelanchier canadensis*)
- Eastern redbud (*Cercis canadensis*)
- cornelian cherry (*Cornus mas*)
- Carolina silverbell (*Halesia carolina*)
- Arnold Promise witchhazel (*Hamamelis x intermedia* 'Arnold Promise")
- magnolia (*Magnolia* var)
- crabapple (*Malus* var)
- Japanese dogwood (*Cornus kousa*)

B. Shrubs

Same as Parkway Shrubs and Lower- to Top-of-Bank Riverbank

Appendix E. Select Regulations Applicable to the Charles River Esplanade - New Basin Complex[a]

CMR[b]	Title	Comments
301 CMR 11.00	Massachusetts Environmental Policy Act (MEPA)	Requires the systematic review of any work or activity undertaken by an agency (e.g., the DCR); involving state permitting or financial assistance; or a transfer of state land.
301 CMR 20.00	Federal Coastal Zone Consistency	Certificate from the Massachusetts Office of Coastal Zone Management that the activity complies with the state Coastal Zone Management program.
302 CMR 10.00	Dam Safety	Includes information on the size and hazard classification of dams, as well as dam inspection, repair, alteration, and removal.
302 CMR 12.00	Forests and Parks Rules	Extensive regulations governing all aspects of park operations including, but not limited to: hours of operation; public behavior; consumption of alcohol; the presence of pets; fires; special use permits; hunting, fishing, and trapping; traffic rules and parking; campsites; trail use; and wind and board surfing.
304 CMR 7.00	Management Plans for all DCR Reservations, Parks and Forests.	Requires a management plan for each state reservation, park, and forest under the control of the Department of Environmental Management. This regulation was superseded by MGL Chapter 21: Section 2F, which requires management plans for all DCR "reservations, parks, and forests."
310 CMR 9.00	Chapter 91 Waterways License	These regulations protect and promote the public's interest in tidelands, Great Ponds, and non-tidal rivers; preserve and protect the public's rights in tidelands; protect the public health, safety, and general welfare as it may be affected by any project in tidelands, Great Ponds, or non-tidal rivers; support efforts to revitalize unproductive property along urban waterfronts; and foster the rights of the people to values identified in Article XCVII of the Massachusetts Constitution. For the purpose of these regulations, all lands lying below the historic high water mark of the Charles River are considered to be "trust lands."
310 CMR 10.00	Wetlands Protection Act	Regulates many activities on land under water bodies, banks, anadromous fish runs, land subject to flooding and bordering vetgetated wetlants, and within 100 feet of wetlands and certified vernal pools, and within 200 feet of perennial streams and rivers. Wetland regulations are administered by the local Conservation Commission.
310 CMR 15.00	Title 5: State Environmental Code	Standard requirements for the siting, construction, inspection, upgrade and expansion of on-site sewage treatment and disposal systems for the transport and disposal of septage.
310 CMR 19.00	Solid Waste management	Regulates the storage, transfer, processing, treatment, disposal, use and reuse of solid waste; including requirements specific to the closure of landfills.
310 CMR 22.00	Drinking Water	Includes regulations for Transient Non-community Water Systems, which provide water to 25 or more persons at least 60 days/year.
314 CMR 4.00	Massachusetts Surface Water Quality Standards	These standards "secure to the Commonwealth the benefits of the Clean Water Act." They designate the most sensitive uses for which the waters of the Commonwealth shall be enhanced, maintained and protected; prescribe minimum water quality criteria; and contain regulations necessary to achieve designated uses and maintain water quality. These standards include the identification and regulation of Outstanding Resource Waters.
33 CFR 114, 115 33 USC 401, 403	Rivers and Harbors Act of 1899	Section 10 regulates the construction of structures or work in narigable waters of the U.S. Section 9 regulates construction and operation of bridges over the navigable waters of the U.S. These regulations are administered by the U.S. Coast Guard.

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Appendix E. Select Regulations Applicable to the Charles River Esplanade - New Basin Complex[a] (Continued)

CMR[b]	Title	Comments
320 CMR 2.00	Public Access Facilities	Regulates use of Office of Fish and Boating Access (formerly Public Access Board (PAB)) boat ramps. These facilities may only be used for "the launching and retrieval of any trailered or cartop watercraft and parking of the vehicle used to launch and retrieve watercraft in a properly marked parking area."
321 CMR 2.00	Miscellaneous Regulations Relating to Division of Fisheries and Wildlife	Addresses a variety of fish and wildlife issues, including scientific collecting permits and the importation, liberation, and transportation of fish, amphibians, reptiles, birds, and mammals.
321 CMR 3.00	Hunting	Regulates hunting and trapping in Massachusetts. Additional hunting and trapping regulations, specific to DCR parks, are identified in 304 CMR 12.00.
321 CMR 4.00	Fishing	Regulates the taking of freshwater fish in Massachusetts. Additional fishing regulations, specific to DCR parks, are identified in 304 CMR 12.00.
321 CMR 10.00	Massachusetts Endangered Species Act (MESA)	MESA protects rare species and their habitats by prohibiting the "Take" of any plant or animal species listed as Endangered, Threatened, or Special Concern. Activities that may alter rare species habitat (e.g., trail maintenance, vista pruning) are subject to regulatory review. On state-owned land, "all practicable means and measures shall be taken to resolve conflicts between the protection, conservation, and restoration of state-listed species…and other uses of such lands in favor of the listed species."
333 CMR 10.00	Certification and Licensing of Pesticide Applicators	Requires that anyone applying herbicides, insecticides, or other pesticides on non-residential property (i.e., all DCR properties) must be certified and licensed.
521 CMR 19.00	Architectural Access Board; Recreational Facilities	Accessibility standards for rinks, pools, beaches, playgrounds, picnic areas, campsites, and other indoor and outdoor facilities.
521 CMR 23.00	Architectural Access Board; Parking and Passenger Loading Zones	Specifies dimensional, pavement marking, and sign requirements for accessible parking spaces and passenger loading zones.
350 CMR 2.00	Use of Reservations and Parkways	Rules and regulations for use of MDC reservations and parkways.
350 CMR 12.00	Use of the Waters of the Charles River	Rules and regulations for use of the Charles River waters from the Watertown Dam to the Charles River Dam.
801 CMR 4.02	Fees for Licenses, Permits, and Services to be Charged by State Agencies	Specifies fees for camping; parking; use of picnic pavilions, athletic fields, ice rinks, golf courses; special use permits; timber harvests, forester licensing, well digging, dam safety permits, and other miscellaneous activities.
950 CMR 70.00	Massachusetts Historical Commission	Standardizes procedures for conducting archaeological investigations in Massachusetts by controlling activities that will disturb archaeological properties. Requires a permit from the State Archaeologist for conducting "field investigation activities on any land owned or controlled by the Commonwealth."
950 CMR 71.00	Protection of Properties Included in the State Register of Historic Places	Requires Massachusetts Historical Commission notification of projects undertaken, funded, or licensed by a state body.

a. A variety of state regulations apply to both the operation of state parks and the behavior of visitors to these parks. This table includes only those regulations directly related to topics addressed in the main body of this RMP.

b. The Code of Massachusetts Regulations, or CMR, "contains regulations promulgated by state agencies" (Massachusetts Trial Court Law Libraries 2012). These regulations "have the force and effect of law like statutes."

Appendix F. Cultural Resources and Major Infrastructure

Cultural Resources and Major Infrastructure[a] of the Lower Basin

Location and Resource	Type[b]	Condition[c]	Date[d]	Historic[e]
Boston University Bridge (Mass DOT)	BR	1	1928	Yes
Grand Junction Railroad Bridge (Mass DOT)	BR	5	1927	Yes
Boston University Sailing Pavilion (BU Permit)	BU	4	1940, 1946	No
Boston University Pedestrian Overpass	BR	3	-	No
BU Pump Station	BU	4	-	No
Charlesgate				
Sherborn Street Pedestrian Overpass	BR	3	-	No
Deerfield Street Pump Station	BU	4	-	No
Deerfield Street Dock	ST	3	-	No
Original Seawall	ST	3	c. 1870s	Yes
Seawall and Decorative Railing	ST	3	1951	
Muddy River Stone Footbridge	BR	3	1909	Yes
Fens Gate House	BU	3	1909	Yes
Harvard (Massachsetts Avenue) Bridge	BR	2	1891,1987-90	Yes
James J. Storrow Memorial Drive	PW	3	1951, 1955	Yes
Boston Esplanade				
Stoneman Playground	LA	2	2001	No
Harvard Bridge Pump Station	BU	4	-	No
Gloucester Street Pedestrian Overpass	BR	3	-	No
Gloucester Street Landing	LA	4	1935	Yes
Gloucester Street Dock	ST	3	-	No
Fairfield Street Pump Station	BU	4	-	No
Dartmouth Street Landing	LA	4	1935	Yes
Dartmouth Street Pedestrian Overpass	BR	3	-	No
Dartmouth Street Sanitary	BU	2	1953	No
Storrow Drive Tunnel West Pump Station	BU	2	1955	No
Storrow Drive Tunnel East Pump Station	BU	2	1955	No
Esplanade Playspace	LA	2	2010	No
Back Street Seawall	ST	4	1845-50,1860-64	Yes
James Storrow Memorial Embankment	LA	3	1935	Yes
Esplanade Café (Permit)	BU	2	1980s	No
Edward A. Hatch Memorial Music Shell	BU	2	1940	Yes
Hatch Memorial Sanitary	BU	2	1960s	No
Gondola Kiosk (Permit)	ST	2	2001	No
Commissioners Landing and Docks	ST	5	1935	Yes
Union Boat Club (Permit)	BU	2	1909	Yes
Community Sailing Boat House (Mngt. Agrmnt)	BU	3	1941, 1987	Yes
Community Sailing Docks (Management Agrmnt)	ST	2	2011	No
Boat Haven Docks (3)	ST	2	2008	No
Storrow Lagoon	LA	4	1935	Yes
Concert and Dartmouth Lagoons, and Canoeway	LA	3	1951	Yes
Lagoon Bridges (5)	BR	3	1935, 1951	Yes
Arthur Fiedler Footbridge	BR	4	1954	Yes
Charles Eliot Memorial	SI	1	1939	Yes
Charles Street Circle Overpass	BR	5	-	No
Arthur Fiedler Memorial Sculpture	OB	2	1984	Yes
River Dock	ST	2	2006	No

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Appendix F. Cultural Resources and Major Infrastructure

Cultural Resources and Major Infrastructure[a] of the Lower Basin (Continued)

Location and Resource	Type[b]	Condition[c]	Date[d]	Historic[e]
Boston Esplanade				
Edwin Upton Curtis Memorial	OB	4	1923	Yes
Lotta Fountain	OB	4	1939	Yes
Maurice J. Tobin Statue	OB	2	1958	Yes
Oliver Wendell Holmes Memorial	OB	4	1914	Yes
David Mugar Fourth of July Memorial	OB	2	1998	No
General Charles Devens Statue	OB	2	1896	Yes
General George Patton, Jr. Statue	OB	2	1955	Yes
David Ignatius Walsh Statue	OB	2	1954	Yes
MDC Centennial Memorial	OB	2	1993	No
Storrow Memorial	OB	2	1936	Yes
Bench Shelter	ST	4	c. 1930s	Yes
Longfellow (Cambridge) Bridge	BR	5	1906	Yes
Charlesbank Park (Lederman Park)	LA	3	1892	Yes
Lederman Memorial	OB	3	1974	No
Teddy Ebersol's Red Sox Fields	LA	1	2008	No
Lee Pool and Wading Pool	BU	5	1951	No
Granite Seawall	ST	3	1860s, 1908	Yes
Blossom Street Overpass	BR	4	-	No
Lechmere Canal	ST	2	1874	Yes
Lechmere Canal Park	LA	2	1987	No
East Cambridge Embankment (The Front)	LA	4	1890s	Yes
Cambridge Parkway	PW	3	1928	Yes
Seawall	ST	3	1928	Yes
Charlesgate Yacht Club	ST	2	1946	No
Broad Canal	ST	3	1803	Yes
First Street Bridge (MassDOT)	BR	4	1924	Yes
Cambridge Parkway Bridge and Shed (MassDOT)	BR	4	1957	Yes
Memorial Drive	PW	3	1897-99, 1908	Yes
Cambridge Esplanade	LA	3	c. 1890	Yes
Granite Seawall and Railings	ST	3	c. 1883-1899	Yes
Harvard Sailing Pavilion (Harvard Lease)	BU	2	-	No
Charles River Yacht Club (Lease)	BU	2	-	No
Wood Sailing Pavilion (MIT Lease)	BU	2	1936	No
Massachusetts Avenue Pump Station	BU	2	-	No
Memorial Drive Pump Station	BU	2	-	No
Memorial Drive Underpass	ST	2	1932	Yes
Pierce Boathouse (MIT Permit)	BU	2	1966	Yes
DeWolfe Boathouse (BU Lease)	BU	2	1999	No

Continued on next page.

Appendix F. Cultural Resources and Major Infrastructure

Cultural Resources and Major Infrastructure[a] of the New Basin

Location and Resource	Type[b]	Condition[c]	Date[d]	Historic[e]
Historic Charles River Dam and Lock	ST	3	1910	Yes
Tennis/Basketball Courts	ST	3	-	No
Charlesbank Playground	ST	2	-	No
Charles River Lock	ST	4	1908	Yes
Upper Lock Gate House	BU	5	1908	Yes
Stop Plank House (Flood Control Garage)	BU	5	1937	Yes
Lower Lock Gate House (State Police Barracks)	BU	4	1908, 1914	Yes
Elevated Street Railway Viaduct (MBTA)	ST	4	1912	Yes
Leverett Circle Pump Station	BU	4	-	No
Craigie Draw Bridge (Mass DOT)	BR	1	2011	No
Craigie Dam Bridge (Mass DOT)	BR	1	1910	Yes
Washburn Pavilion (MOS Lease)	ST	1	1909	Yes
Museum of Science (MOS Lease)	BU	1	1951, 1958	No
Parking Garage (MOS Lease)	BU	2	1972	No
Historic Boat House	BU	6	1909	Yes
Historic Stables/Garage	BU	5	1909	Yes
North Point Park	LA	2	2007	No
Boston and Maine Railroad Seawall	ST	2	1928	Yes
Lagoon Bridges (4)	ST	1	2007	No
Playground	ST	1	2007	No
Spray Deck	ST	1	2007	No
North Point Maintenance Yard				
Staff Offices (2)	BU	2	2012	No
Vehicle Garages (3)	BU	1	2012	No
Prision Point CSO Treatment Facility (MWRA)	BU	2	-	No
North Bank Pedestrian Bridge	ST	1	2012	No
Bascule Railroad Bridges (MBTA)	BR	5	c.1930	Yes
Paul Revere Park	LA	3	1999	No
New Charles River Dam and Locks	ST	3	1978	No
Pumping Station	BU	2	1978	No
State Police Marine Station and Piers	BU	2	1978	No
Nashua Street Park	LA	2	2004	No
Prince Street Park	LA	3	-	No
Charlestown Bridge Underpass	ST	1	-	No
Wood Pier	ST	5	-	No
Tennis Courts	LA	2	-	No
Steriti Skating Rink	BU	3	-	No
City Square Park	LA	1	1996	No
EHO Skating Rink	BU	3	-	No

a. Unless otherwise noted, major infrastructure does not include gates, railings, kiosks, signs, non-public wells, septic systems, etc.
b. Resource types include the following: BU = Building; BR = Bridge; ST = Structure; LA = Landscape; PW = Parkway; SI = Site; and OB = Object.
c. Preliminary visual condition assessment using the Building System and Equipment Condition Codes as used in the Massachusetts Capital Asset Management Information System (CAMIS). The following codes are used: 1 = Excellent – Easily restorable to like new condition; 2 = Good – Routine maintenance required; 3 = Adequate – Some corrective and preventative maintenance required; 4 = Fair – Excessive corrective maintenance and repair required; 5 = Poor – Renovation needed; and 6 = Fail.
d. Year of completion or opening, when available.
e. Entries in this column indicate if the item is a historic resource.

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