

Appendix A - Nashua River Watershed Tributary Basin Major Water Resource Issues, Recreation And Priority Habitat Areas, And Resource Protection Goals And Recommended Actions.

(Note: The Metropolitan District Commission (MDC) is now the Massachusetts Department of Conservation and Recreation (DCR))

The Quinapoxet River Sub-Basin

Land Area:	57 sq miles or 35,463 acres
Primary Municipalities:	Holden, Princeton, Rutland
Permanently Protected Land Area:	11,396 acres or 48%
River length:	10.6 miles
% Imperviousness:	8.2 %
# of NPDES* discharge permits:	3 minor
Limited Protection Land Area (Chap. 61, etc.):	6,219 acres
Dams:	1; DCR in West Boylston

Geographic Overview and Ecosystem Characteristics: Most of this sub-basin lies in the Massachusetts communities of Holden, Princeton and Rutland with parts extending into Paxton and West Boylston. Located in the "fuzzy" zone encompassing parts of both the Upper Worcester Plateau and the Southern New England Coastal Plains and Hills ecoregions of central Massachusetts, this area drains into the Wachusett Reservoir: the largest body of open water in the greater Nashua River watershed.

Topography is generally hilly, encompassing numerous flatter wetlands, broad valleys, and floodplains. A low percentage (8.2%) of total impervious surfaces — namely, paved areas such as streets, driveways, and parking lots — for this whole sub-basin indicates that concerns of compromised stormwater and other non-point sources of contaminants (for example: pesticides, fertilizers, oils, asphalt, pet wastes, salt, sediment, litter and other debris) is not a pressing concern. As detailed below in the "water resources" section, there is a large amount of permanently protected undeveloped open space in this sub-basin.

Land Ownership and Land Use Patterns: The land-use pattern is predominantly forest (hardwood mixed with softwood) or wetland plus low-density residential settlement as well as concentrated settlements and strip development located near town centers and along major roads. Agriculture (notably "hobby farms" and backyard horse paddocks), gravel extraction, commercial operations, industry and other developed land uses are less significant.

Major Water Resource Issues: Most of the already heavily developed areas in the sub-basin are served by public water systems. The majority of Rutland and Holden town residents have on-site septic systems but both town centers are sewered. All the sewered flow is carried outside of the Nashua River watershed to the Upper Blackstone Water Pollution Abatement District facility. There are no wastewater treatment plants in this sub-basin. The one National Pollution Discharge Elimination System (NPDES) permit is for Holden Trap Rock Company on Austin Brook. Streamflow, as in most of New England, has significant seasonal changes.

Based on recent findings in a Hydrologic Analysis (inflow/outflow) by Camp, Dresser, McKee, under contract with Executive Office of Energy and Environmental Affairs (EOEEA) for the Massachusetts Watershed Initiative Nashua Team, the upper reaches of the Quinapoxet sub-basin are currently under a medium level of stress. With continued withdrawals over the next 20 years, the entire Quinapoxet sub-basin will be experiencing flow stress. The upper reaches, from the Quinapoxet Reservoir up, will remain under "medium stress". The lower reaches (remaining portion discharging directly to Wachusett reservoir) will also be under medium stress.

Medium stress means that the net 7Q10 outflow from the sub-basin equals or exceeds the estimated natural 7Q10. 7Q10 is the lowest consecutive 7 day streamflow that is likely to occur in a ten year period

in a particular river segment. High stress means that the net average August outflow from the sub-basin equals or exceeds the estimated natural August average flow.

The areas around Muschopauge Pond--which supplies water to the Towns of Rutland and Holden — and Asnebumskit Pond--which supplies water to the Town of Paxton — are locally zoned for watershed protection. There are two major surface water supply systems for the City of Worcester (which include the Quinapoxet Reservoir, Pine Hill Reservoir, and Kendall Reservoirs 1 and 2). Indeed, 36% of the Quinapoxet sub-basin's water is diverted into the City of Worcester's reservoirs and from there to Blackstone River basin.

A total of 35% of this sub-basin is protected open space (Worcester reservoirs' surface water included). The City of Worcester owns the land that immediately surrounds each of its reservoirs and approximately 25% of its entire water supply watershed: it is a highly-protected forest with no public access. Furthermore, the Department of Conservation and Recreation (DCR) is a large land owner, the Town of Holden owns over 600 acres as the Trout Brook Conservation Area, and Massachusetts Audubon Society owns several hundred acres in the Wachusett Meadow Wildlife Sanctuary in addition to other properties in the sub-basin.

This sub-basin features an extensive network of streams and rivers feeding the Wachusett reservoir including: Asnebumskit, Ball, Bumbo, Cobb, Governor, Muschopauge, Trout, and the Quinapoxet. According to the 1998 Nashua River Watershed Report Card, the upper 4.5 miles of the Quinapoxet River is rated as non-supportive of biology and hydrology. The DCR believes that low flow is the cause of impaired habitat. The low flow is related to limited discharge from Worcester's Quinapoxet Reservoir. Given the Quinapoxet is a noted trout stream, there is a concern for the trout fishery that hydromodification and water withdrawals lead to reduced streamflows; thus, less habitat and often lower quality habitat, since less flow is available to dilute pollutants and stream temperatures are likely to be higher.

The lower Quinapoxet is rated as on alert for biology, chemistry and hydrology. Chaffin's Brook is considered a "moderately septic polluted stream" and its lower reach has noxious aquatic plants in an impoundment. Trout Brook in Holden is considered to be high quality habitat and have limited disturbance. There are a number of medium yield aquifers surrounding Holden center and to protect this resource the town has passed an aquifer protection bylaw.

As for the water quality of the sub-basins' lakes and ponds: Streeter Pond in Paxton, and Eagle Lake and Dawson, Stump and Unionville Ponds in Holden are all considered to be eutrophic as well as to have noxious and non-native plants. Maple Spring Pond in Holden is considered to be eutrophic, and Chaffin Pond in Holden is considered to be hypereutrophic. There are no 303d-listed impaired water bodies in this sub-basin.

Recreation and Priority Habitat Areas: Wachusett Mountain, Quinapoxet Reservoir, and Pine Hill Reservoir areas have been identified as important core habitat areas. Muschopauge Brook, especially at Holbrook Swamp is a protection priority, as are the extensive wetlands with adjacent uplands south of Davis Hill. This focus area is a connector between the expansive open space of Mt. Wachusett to the north, the Pine Hill Reservoir focus area to the south, and the Poutwater Pond focus area to the east.

The Pine Hill Reservoir focus area forms the southern extent of a string of open areas stretching north. It is exceptional for the extent of undeveloped hillside directly adjacent to large bodies of water. The area around the reservoirs is known to provide excellent snake habitat. Protection priorities include Bond Hill and the wetland to the west and unprotected interior parcels such as the area around Worcester Brook north of Pine Hill Reservoir, and Streeter Pond to the south.

The Poutwater Pond focus area is an important corridor between the Savage Hill and Wekepeke Brook focus areas and is the nearest large area of limited development to the west of Wachusett Reservoir. Poutwater Pond and the adjacent, large spruce-tamarack bog wetland/ upland combination are likely important reptile and amphibian breeding habitat. Priorities are Flagg and Hog Hills.

Resource Protection Goals and Recommended Actions

GOAL: Protect wildlife habitat and migration corridors in the sub-basin.

- Assist DCR, MassWildlife, other state agencies, municipalities, and local land trusts in consensual transactions to acquire additional open space in priority areas.
- Sponsor local events to raise public understanding about native wildlife and the impacts of development patterns on ecosystem and habitat integrity.
- Work with local conservation commissions to gain their backing for natural resource and habitat inventories.
- Continue DCR-Division of Watershed Management's Private Land Forestry program which encourages private forest landowners to adopt forestry practices — namely, forest management planning required by the Chapter 61 program — that protect water quality.
- Encourage citizen certification of vernal pools.

GOAL: Protect high-priority open space, vistas, and community character in the sub-basin.

- Encourage the use of MA Executive Order 418 funding for "Open Space and Resource Protection Plans" for each Massachusetts community in the Quinapoxet River sub-basin.
- Conduct public education sessions to promote local passage of Community Preservation Act.
- Work toward ideal of at least 25-50% protected open space in each municipality.
- Work with municipal officials to develop subdivision standards that require proponents to devote at least 50% of land (not including already undevelopable wet or steep land) for open space conservation and encourage mixed-use development and cluster zoning by-right bylaws.

GOAL: Increase recreational opportunities throughout the sub-basin.

- Support the Wachusett Greenways group in its volunteer efforts to link communities via open spaces and multi-use inter-municipal trails and, in particular, the Mass Central Rail Trail.
- Improve recreational opportunities by removing weeds from water bodies.
- Educate the public and municipal departments (especially Public Works Depts.) on efforts relating to invasive species identification and removal.

GOAL: Improve water quality in the basin.

- Assist Holden, Paxton and West Boylston with its EPA's Clean Water Act-mandated MS-4 Phase II stormwater requirements. These municipalities will be required to obtain permits to reduce impacts to the receiving streams through the development of Best Management Practices (BMPs), elimination of cross-connections and significant public education. CSO controls and the development of a long-range control plan will be required.
- Conduct more detailed inflow/outflow studies given stressed status of some waterways.
- Determine status of Holden Trap Rock Stormwater Prevention Plan.
- Monitor for waste solvent (vinyl chloride) and high metals leaching from Holden landfill into groundwater.
- Identify the major sources of fecal coliform and nitrate-nitrogen inputs to the river and work with communities to address the problem.
- Identify the degree of threat from potential faulty/ illicitly discharging septic systems, which may result in bacterial and nutrient contamination of nearby streams and groundwater.
- Identify underground storage tanks and work with communities to have them removed.
- Monitor effects of increasing urbanization to prevent diminished groundwater recharge and to declining stream flow as well as stream channel widening and downcutting.
- Help develop and disseminate Best Management Practices for small-scale agricultural operations.

GOAL: Reduce negative effects of development in this sub-basin.

- Monitor uncontrolled runoff from construction sites to prevent sedimentation of streams.
- Track increased imperviousness and both direct and indirect riparian zone alterations that may increase stream temperature and cause sedimentation.
- Help local volunteer board members responsible for development and land-use rulemaking and enforcement get technical assistance and information regarding fundamental and innovative

techniques to control and guide land use and development balanced with adequate resource protection (e.g., Citizens Planner Training Collaborative workshop offerings).

- Increase or establish staff hours of municipal conservation agents to more effectively monitor runoff from construction sites and assist with the preparation of relevant bylaws.
- Write and implement stormwater, erosion and sedimentation bylaws/controls.

The Stillwater River Sub-Basin

Land Area:	39.3 square miles or 23,401 acres
Permanently Protected Land Area:	8,778 acres (13.6 sq miles) or 47%
Limited Protection Land Area (Chap. 61, etc.):	3126 acres (4.8 sq miles)
River length:	9.9 miles
Dams:	none
% Imperviousness:	~ 8%
# of MA NHESP* Priority Habitat Sites:	1
# of NPDES* discharge permits:	none
Most threatened waterbodies:	Bartlett, Quag and Stuart Ponds. East Wachusett and Waushacum Brooks

Geographic Overview and Ecosystem Characteristics: Most of this sub-basin lies primarily in the communities of Sterling, Princeton and West Boylston with parts extending into Holden, Leominster, and Westminster. Located in the "fuzzy" zone encompassing parts of both the Upper Worcester Plateau and the Southern New England Coastal Plains and Hills ecoregions of central Massachusetts, this area drains into the Wachusett Reservoir: the largest body of open water in the greater Nashua River watershed.

Topography is generally hilly, encompassing numerous flatter wetlands, broad valleys, and floodplains. This sub-basin has a large amount (49%) of permanently protected undeveloped open space owned by Department of Conservation and Recreation (DCR), the municipalities, and others: particularly along the lower Stillwater. Another significant portion of private lands are classified as Chapter 61, 61A or 61B.

A low percentage (less than 8%) of total impervious surfaces -- namely, paved areas such as streets, driveways, and parking lots-- for this whole sub-basin indicates that concerns of compromised stormwater and other non-point sources of contaminants (for example: pesticides, fertilizers, oils, asphalt, pet wastes, salt, sediment, human litter and other debris) is not a pressing concern. As the Stillwater watershed becomes increasingly developed, there will be more threat of water quality deterioration from risks associated with urbanization, including thermal pollution, over-fertilization of lawns, improper handling of hazardous wastes, septic system leachate, street runoff, and the like.

Land Ownership and Land Use Patterns: The land-use pattern is predominantly undeveloped forest (hardwood mixed with softwood) or wetland plus low-density residential settlement in the hilly upland areas. Concentrated settlements and strip developments are located near town centers and along major roads. Heavily traveled Interstate 190 runs through this sub-basin. The highway which connects Worcester and Leominster has led to and will continue to lead to increased development pressures, primarily of single-family residences. Agriculture (notably "hobby farms" and backyard horse paddocks), commercial operations, industry and other developed land uses are less significant. However, sand and gravel extraction operations are contributing to sedimentation and land use change.

Major Water Resource Issues: Streamflow, as in most of New England, has significant seasonal changes. Existing flows for the Stillwater River are considered to be under "medium stress". The Stillwater River system is an important water supply (that is, overlying a major aquifer). The River - and the very extensive wetland system bordering it-- feeds the Wachusett Reservoir (12% of the reservoir's total) and is in turn fed by numerous streams including: Ball, Babcock, Bailey, Connelley, East Wachusett, Houghton, Keyes, Rocky, Scanlon, Washacum and Wilder. There are no wastewater treatment plants nor NPDES permittees in this sub-basin. The majority of residents have on-site septic systems although a number of homes will be serviced by the new Holden-West Boylston Sewer Project.

As for specific areas of concern, there is streambank erosion along Crowley Road in Sterling which can lead to siltation/sediment deposition, higher instream temperatures, and threatened habitat. Further, Bartlett Pond in Leominster, and the Quag and Stuart Pond in Sterling are eutrophic and are heavily vegetated with noxious* plants. East Wachusett Brook in Princeton-Sterling is considered to only partially support recreation due to high bacteria (fecal coliforms) during both wet and dry conditions; otherwise, it has high quality habitat and limited disturbance. Waushacum Brook, however, is considered a "moderately septic polluted stream".

On a positive note, Justice Brook in Sterling is very clean and has particularly low bacteria levels. The River and several of its tributaries are stocked with trout and self-reproducing populations of native brook trout are found throughout the sub-basin. According to the 1998 Nashua River Watershed Report Card, the Stillwater is rated as on alert for aquatic habitat. Beavers, on the other hand, have capitalized on the present environmental conditions and proliferated to the point of being considered a "nuisance" species. The most serious damage beavers are causing in this sub-basin, in addition to increased localized flooding behind their dams, is from bacterial contamination of wellwater. There is no 303(d)-listed impaired water body in this sub-basin.

Recreation and Priority Habitat Areas: Keyes Brook, a tributary to the Stillwater running northwest from West Sterling, is part of the MA Natural Heritage and Endangered Species Program Priority Habitat area that connects down the Stillwater all the way to Wachusett Reservoir and is habitat for numerous listed turtle species. The area is not without some development, yet it is an important connector between the extensive habitat of focus areas to the northwest (Bartlett Swamp, Wachusett Mt. State Reservation, and Leominster State Forest) and southwest (Poutwater Wildlife Management Area in the Quinapoxet sub-basin). Protection priorities should focus on Hy-Crest Pond area and south of Justice Hill Road.

Resource Protection Goals and Recommended Actions

GOAL: Protect wildlife habitat and migration corridors in the sub-basin.

- Assist DCR, MassWildlife, other state agencies, municipalities, and local land trusts in consensual transactions to acquire additional open space in priority areas especially in Hy-crest Pond to south of Justice Hill Road area.
- Sponsor local events to raise public understanding about native wildlife and the impacts of development patterns on ecosystem and habitat integrity.
- Work with local conservation commissions to gain their backing for natural resource/ habitat inventories.
- Continue DCR — Division of Watershed Management's Private Land Forestry program which encourages private forest landowners to adopt forestry practices — namely, forest management planning required by the Chapter 61 program — that protect water quality.
- Encourage citizen certification of vernal pools.

GOAL: Protect high-priority open space, vistas, and community character in the sub-basin.

- Assure continued commitment from DCR to using Stillwater Farm as an educational resource for watershed protection as well as a eco-tourist destination.
- Encourage the use of MA Executive Order 418* funding for "Open Space and Resource Protection Plans" for each Massachusetts community in the Stillwater River sub-basin.
- Conduct public education sessions to promote local passage of Community Preservation Act.
- Work toward ideal of at least 25-50% protected open space in each municipality.
- Work with municipal officials to develop subdivision standards that require proponents to devote at least 50% of land (not including already undevelopable wet or steep land) for open space conservation and encourage mixed-use development and cluster zoning by-right bylaws.

GOAL: Increase recreational opportunities throughout the sub-basin.

- Support the Wachusett Greenways group in its volunteer efforts to link communities via multi-use intermunicipal trails and open spaces, and in particular the Mass Central Rail Trail.
- Improve canoeing, fishing, and swimming opportunities by removing weeds from water bodies and educating the public about the spread of invasive plants.

- Educate municipal departments (especially Public Works Depts.) on efforts relating to invasive species identification and removal.

GOAL: Improve water quality in the basin.

- Conduct more detailed inflow/outflow studies given stressed status of some waterways.
- Encourage Town of Sterling to apply for state Aquifer Land Acquisition funds to acquire land adjacent to town wellfield (if appropriate to town).
- Identify the major sources of fecal coliform and nitrate-nitrogen inputs to the river and work with communities to address the problem.
- Assist the municipalities of Holden, Leominster and West Boylston in implementing EPA's Phase II stormwater requirements. These municipalities will be required to obtain permits to reduce impacts to the receiving streams through the development of Best Management Practices (BMPs), elimination of cross-connections and significant public education. CSO controls and the development of a long-range control plan will be required.
- Identify the degree of threat from potential faulty/ illicitly discharging septic systems, which may result in bacterial and nitrate contamination of nearby streams and groundwater.
- Identify underground storage tanks (USTs) and work with communities to have them removed.
- Monitor effects of increasing urbanization to prevent diminished groundwater recharge and to declining stream flow as well as stream channel widening and down cutting.
- Help develop and disseminate) Best Management Practices for small-scale, hobby type agricultural operations.

GOAL: Reduce negative effects of development in this sub-basin.

- Monitor uncontrolled runoff from construction sites to prevent sedimentation of streams.
- Track increased imperviousness and both direct and indirect riparian zone alterations that may increase stream temperature and cause sedimentation.
- Help local volunteer board members responsible for development and land-use rulemaking and enforcement get technical assistance and information regarding fundamental and innovative techniques to control and guide land use and development balanced with adequate resource protection (e.g., Citizens Planner Training Collaborative workshop offerings).
- Increase or establish staff hours of municipal conservation agents to more effectively monitor runoff from construction sites and assist with the preparation of relevant bylaws.
- Write and implement stormwater, erosion, and sedimentation bylaws/controls.

Wachusett Reservoir Sub-Basin

Land Area:	21.7 square miles or 16,024 acres
Permanently Protected Land Area:	4,680 acres (7.3 sq miles) or 38%
Limited Protection Land Area (Chap. 61, etc.):	655 acres
Dams:	1 in Clinton
% Imperviousness:	approximately 10.6%
# of MA NHESP* Priority Habitat Sites:	1
# of discharge permits:	none
Most threatened water bodies:	Gates and West Boylston Brooks

Geographic Overview and Ecosystem Characteristics: Most of this 16,024 acre (surface water not included) sub-basin lies in the Massachusetts communities of Boylston and West Boylston with parts extending into Sterling and Holden. Located in the Southern New England Coastal Plains and Hills ecoregion of central Massachusetts, this area drains into the Wachusett Reservoir: the largest body of open water in the greater Nashua River watershed. The Southern New England Coastal Plains and Hills ecoregion is an area with generally similar soils, vegetation, shape of the land, and especially, moderate climate and bedrock geology (glacial tills and outwash deposits). Topography is generally hilly, encompassing numerous flatter wetlands, broad valleys, and floodplains.

Land Ownership and Land Use Patterns: The land-use pattern is nearly 75% forest (hardwood mixed with softwood) or wetland plus low-density residential settlement as well as concentrated settlements and strip development located near town centers and along major roads. Agriculture (notably "hobby farms" and backyard horse paddocks), gravel extraction, commercial operations, industry and other developed land uses are less significant.

Major Water Resource Issues: Streamflow, as in most of New England, has significant seasonal changes. Based on recent findings in a Hydrologic Analysis (inflow/outflow) by Camp, Dresser, McKee, under contract with EOEa for the Massachusetts Watershed Initiative Nashua Team, the Wachusett sub-basin is currently under a medium level of stress. With continued development and withdrawal pressures, the sub-basin will continue as "medium stress" by the year 2020. It should be noted that while there is a minimum flow requirement for discharge over the Wachusett Dam, local and regional water suppliers need to recognize the importance of continuing demand for supply on the reservoir.

This means that the net 7Q10 outflow from the sub-basin equals or exceeds the estimated natural 7Q10. 7Q10 is the lowest consecutive 7 day streamflow that is likely to occur in a ten year period in a particular river segment.

Because the Wachusett watershed is highly managed for the Worcester and MWRA withdrawals, these withdrawals were not considered in the evaluation of stress in the Wachusett Watershed—a much more detailed analysis would be required to evaluate their uses. Instead, the calculations were based on other uses of water in the watershed, particularly withdrawals by Holden, Rutland, Princeton, Sterling, and West Boylston. Based on these withdrawals, three of the four subareas in the Wachusett Watershed were calculated to have medium-stress in the future.

This sub-basin features an extensive network of streams and rivers feeding the reservoir including: Boylston, Chaffin's (Unionville outlet), Gates, Malagasco, Malden, Scarlett and Waushacum Brooks; though, all together these brooks make up a comparatively minor percentage of the total inflow to the reservoir.

Though Wachusett Reservoir is principally fed by the Stillwater and Quinapoxet Rivers—together both account for about 30% of annual inflow -- these two are considered separate sub-basins and are dealt with separately in this Plan. The Wachusett Reservoir provides very high-quality drinking water to a large portion of the Commonwealth's population via the Massachusetts Water Resources Authority (MWRA) and Department of Conservation and Recreation (DCR) Division of Watershed Management (DWM). More than 90% of the water leaving the Reservoir is withdrawn by the MWRA and only a small amount is released downstream to the South Nashua River.

The amount of permanently protected (owned by DCR and others) undeveloped open space, 28.4% (surface water not included), in the sub-basin has meant that the water quality in the reservoir remains excellent, indeed, to such an extent that filtration treatment has to date been considered unnecessary. There are no wastewater treatment plants or industrial discharges in this sub-basin.

10.6% of total impervious surfaces --namely, paved areas such as streets, driveways, and parking lots — for this whole sub-basin indicates that concerns of compromised stormwater and other non-point sources of contaminants (for example: pesticides, fertilizers, oils, asphalt, pet wastes, salt, sediment, human litter and other debris) is an increasingly pressing concern. The majority of residents have on-site septic systems although a number of homes will be serviced by the new Holden-West Boylston Sewer Project.

As for specific areas of concern, Wachusett Reservoir itself has non-native plants and mercury contamination (as found in fish tissue samples); thus, according to the 1998 Nashua River Watershed Report Card, the Wachusett Reservoir is rated as partially-supportive for biology and non-supportive for fish tissue. However, its waters are crystalline with low turbidity, bacterial counts, algal densities, and nutrients. On the other hand, Gates Brook is considered to be the "most contaminated tributary" in this sub-basin with high nitrates and severe impairment for aquatic life. West Boylston Brook is similarly impaired and has the highest nitrate level. Both Gates and West Boylston Brooks are classified by the

DCR as "severely septic polluted", having the highest fecal coliform loadings in this watershed, while Boylston and Malden Brooks are considered "moderately septic polluted streams".

Scarlett Brook is considered to be severely impaired for conductivity and fecal coliform which — as with the above mentioned streams — is expected to rise due to high numbers of improperly functioning septic systems and the area's increasing density of development. Beaman Pond, Boylston, Chaffin's (Unionville outlet), Malagasco, and Waushacum Brooks are other tributaries in this sub-basin which are severely impaired for conductivity or fecal coliform. Gates and Malagasco Brook, in particular, exhibit significant impacts potentially caused by contamination (as yet to be identified). Notwithstanding these limitations, most of the small waterways in this sub-basin are healthy functioning ecosystems exceeding Class A standards in many regards with low levels of phosphorus and other "non-point" pollutants. Also, each of the above mentioned tributaries to the Reservoir have low flows and, thus, contribute only a minor load of "impaired" waters. There are no 303(d)-listed* impaired water bodies in this sub-basin.

Recreation and Priority Habitat Areas: The Reservoir itself is important habitat for lake-nesting and lake-feeding birds. The entire water surface with adjacent upland connects with the Stillwater River as one large state-designated Natural Heritage and Endangered Species Program Priority Habitat area. The BioMap Core Habitat area in this sub-basin corresponds directly with the NHESP Priority Habitat area, while BioMap Supporting Habitat areas lie along the eastern edge of this sub-basin.

Resource Protection Goals and Recommended Actions

GOAL: Protect wildlife habitat and migration corridors in the sub-basin.

- Assist DCR, MassWildlife, other state agencies, municipalities, and local land trusts in consensual transactions to acquire additional open space in priority areas.
- Sponsor local events to raise public understanding about native wildlife and the impacts of development patterns on ecosystem and habitat integrity.
- Work with local conservation commissions to gain their backing of natural resource/ habitat inventories.
- Continue DCR-DWM's Private Land Forestry program which encourages private forest landowners to adopt forestry practices - namely, forest management planning required by the Chapter 61 program — that protect water quality

GOAL: Protect high-priority open space, vistas, and community character in the sub-basin.

- Encourage the use of MA Executive Order 418 funding for "Open Space and Resource Protection Plans" for each Massachusetts community in the Stillwater River sub-basin.
- Conduct public education sessions to promote local passage of Community Preservation Act.
- Work toward ideal of at least 25-50% protected open space in each municipality.
- Work with municipal officials to develop subdivision standards that require proponents to devote at least 50% of land (not including already undevelopable wet or steep land) for open space conservation and encourage mixed-use development and cluster zoning by-right bylaws.

GOAL: Increase recreational opportunities throughout the sub-basin.

- Support the Wachusett Greenways group in its volunteer efforts to link communities via multi-use intermunicipal trails and open spaces, and in particular the Mass Central Rail Trail.
- Improve canoeing, fishing, and swimming opportunities by removing weeds from water bodies.
- Educate the public and municipal departments (especially Public Works Depts.) on efforts relating to invasive species identification and removal.

GOAL: Improve water quality in the basin.

- Conduct more detailed inflow/outflow studies given stressed status of some waterways.
- Evaluate West Boylston and Holden's sewer project for impact on surface water quality.
- Assist Boylston and West Boylston with its EPA's Clean Water Act-mandated MS-4 Phase II stormwater requirements. These municipalities will be required to obtain permits to reduce impacts to the receiving streams through the development of Best Management Practices (BMPs), elimination of

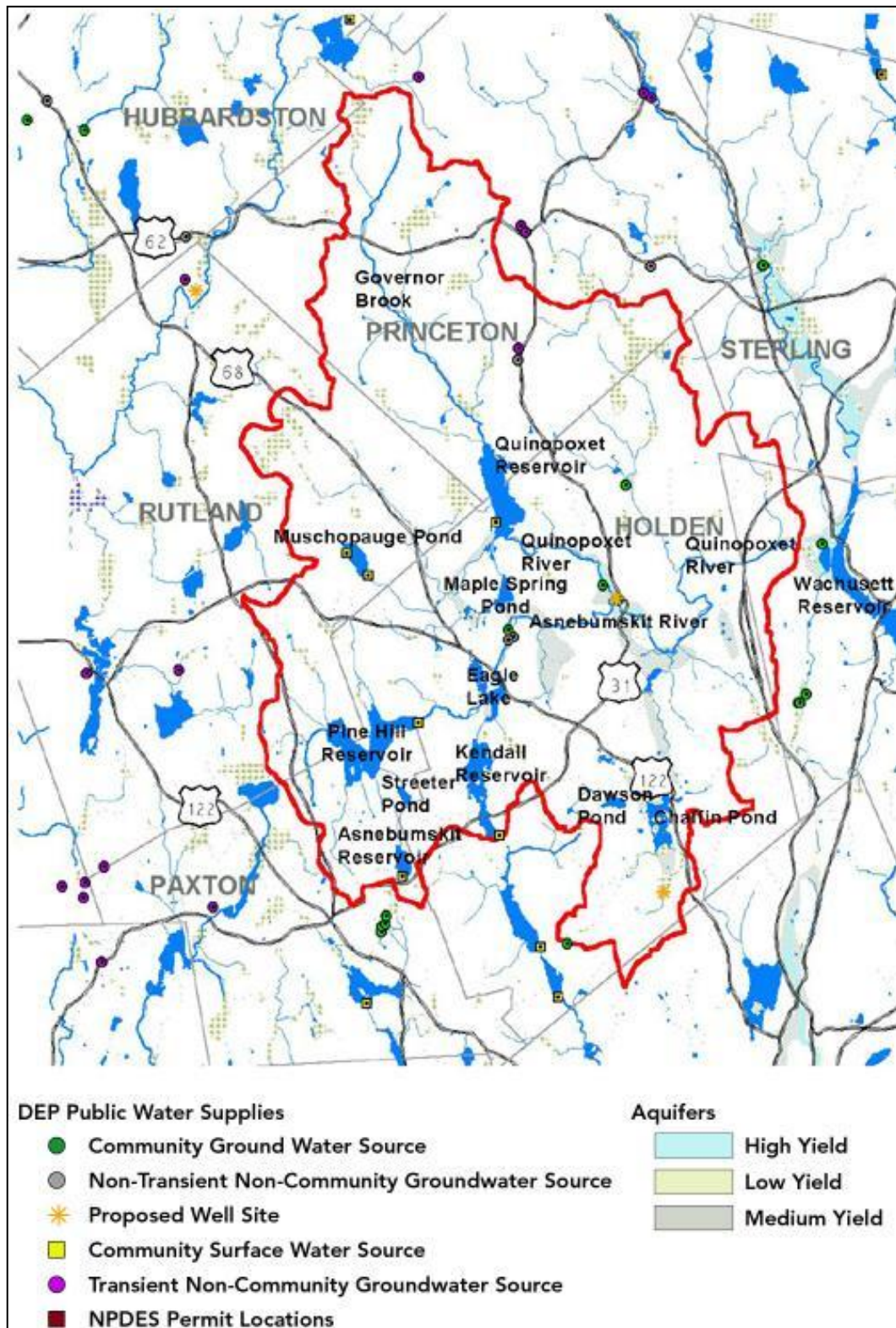
cross-connections and significant public education. CSO controls and the development of a long-range control plan will be required.

- Identify the major sources of fecal coliform and nitrate-nitrogen inputs to the river and work with communities to address the problem.
- Identify the degree of threat from potential faulty/ illicitly discharging septic systems, which may result in bacterial and nutrient contamination of nearby streams and groundwater.
- Identify underground storage tanks (USTs) and work with communities to have them removed.
- Monitor effects of increasing urbanization to prevent diminished groundwater recharge and to declining stream flow as well as stream channel widening and down cutting.
- Help develop and disseminate Best Management Practices for small-scale, hobby type agricultural operations.

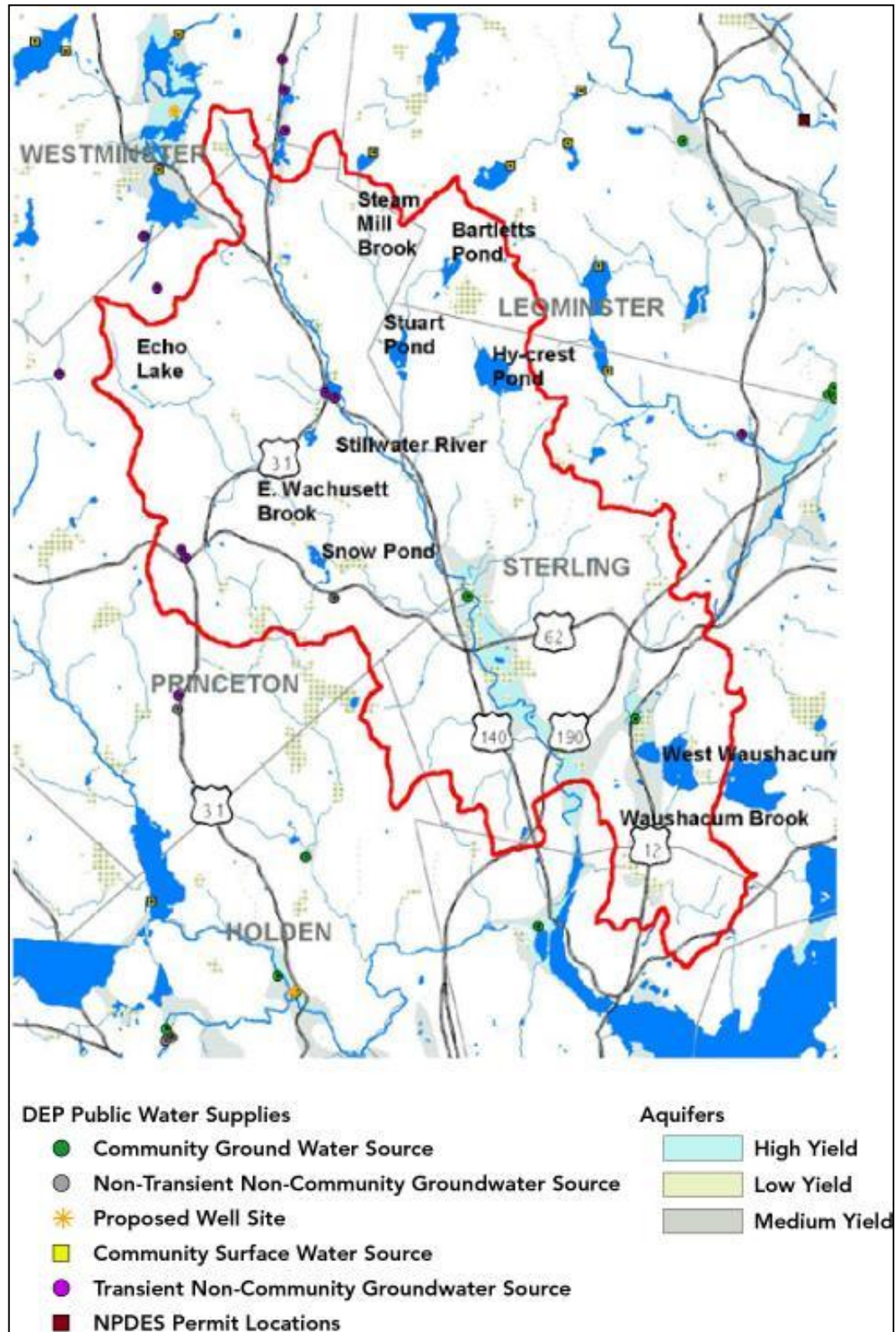
GOAL: Reduce negative effects of development in this sub-basin.

- Monitor uncontrolled runoff from construction sites to prevent sedimentation of streams.
- Track increased imperviousness and both direct and indirect riparian zone alterations that may increase stream temperature and cause sedimentation.
- Help local volunteer board members responsible for development and land-use rulemaking and enforcement get technical assistance and information regarding fundamental and innovative techniques to control and guide land use and development balanced with adequate resource protection (e.g., Citizens Planner Training Collaborative workshop offerings).
- Increase or establish staff hours of municipal conservation agents to more effectively monitor runoff from construction sites and assist with the preparation of relevant bylaws.
- Write and implement stormwater, erosion and sedimentation bylaws/controls.

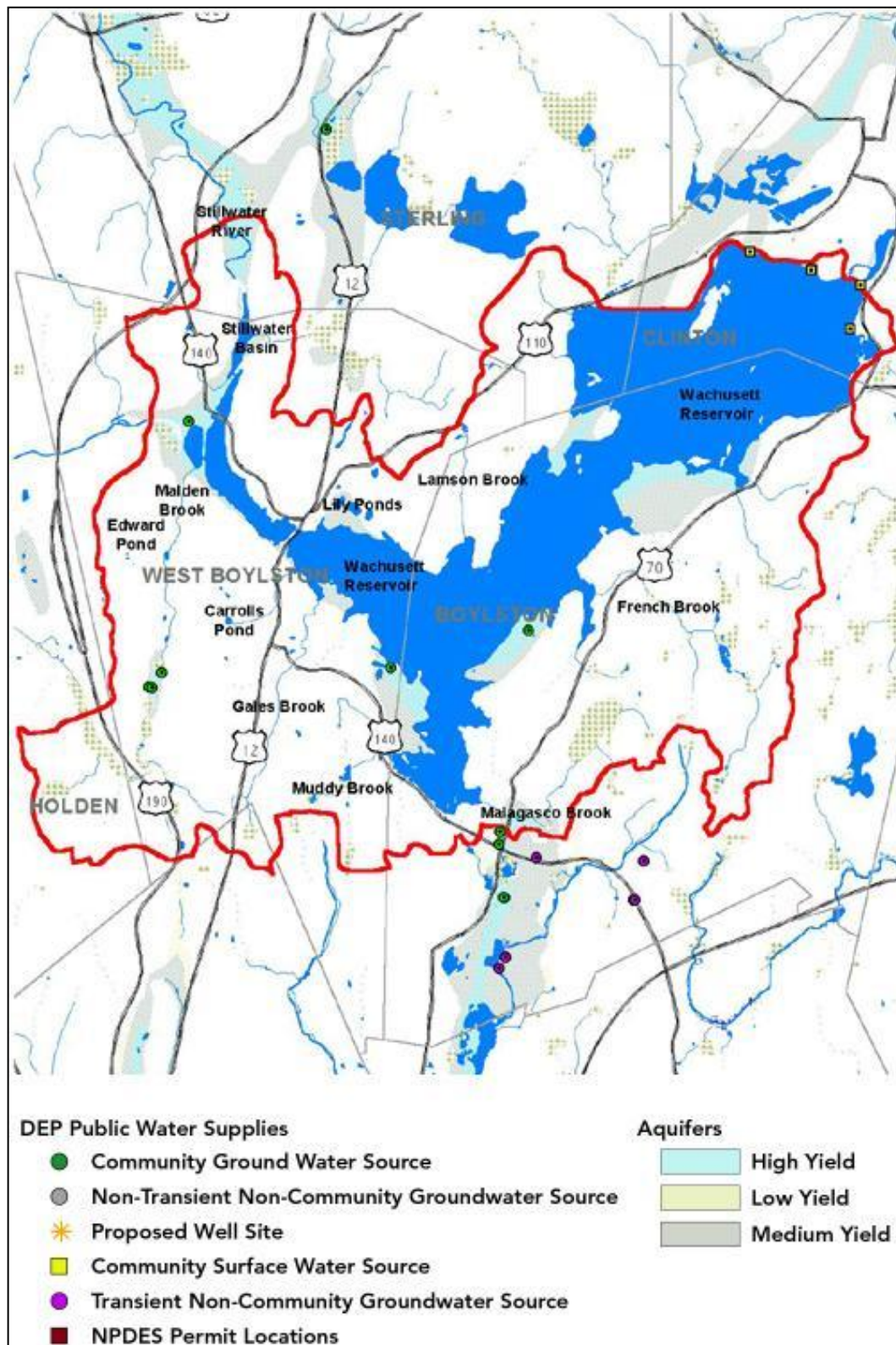
Quinapoxet River Sub-Basin



Stillwater River Watershed Sub-basin



Wachusett Reservoir Sub-basin



Appendix B - Funding Mechanisms and Programs

Purpose	Program/Method	Sponsoring Agency	Funding Amounts	Applicant	Program Description	Priority for pursuing	Chances of success
Improvements	Agricultural Environmental Enhancement Program (AEEP)	DAR	Estimated \$550,000 for FY09. Average grant size \$13,000	Farmers in commercial agricultural production	For the purchase of materials to implement agricultural conservation practices that improve water quality, conserve water, reduce greenhouse gas emissions or conserve energy.		Average number of grants 30.
Non-acquisition programs	Agricultural Preservation Restrictions (APR)	DAR	An estimated \$13,000,000 available for FY09. Grant amounts vary.	Farmers, Land Owners, Municipalities	The APR Program is a voluntary program which offers a non-development alternative to farmers and other owners of prime and "state important" agricultural land who are faced with a decision regarding future use and disposition of their farms. Towards this end, the program offers to pay farmers the difference between the "fair market value" and the "agricultural value" of their farmland in exchange for a permanent deed restriction which precludes any use of the property that will have a negative impact on its agricultural viability.	High	Depends on property owner
Non-acquisition programs	Assessment Act (MGL Chapters 61, 61A and 61B)	DCR, DAR, DOR	No public funds available.	Private landowners	These programs work by making available special property tax assessments to owners who agree to restrict their land to a particular use. Chapter 61 applies to lands actively devoted to forestry use, 61A applies to active agricultural lands, and 61B applies to public recreational lands like wildlife sanctuaries and golf courses. Generally properties are assessed at their current use value rather than their highest use. This usually translates into a substantial property tax savings for owners. The program also requires a right-of-first-refusal option to the town when property owners look to sell their land.	Moderate	Depends on property owner.

Property Acquisition	Conservation Partnership	EOEEA	Estimated FY09 spending \$1,500,000. Average grant size \$75,000.	Non-profits	To assist not-for-profit corporations in acquiring land and interests in lands suitable for conservation or recreation.		Average number of grants 8.
Non-acquisition programs	Conservation Restrictions (CRs)	DCS	Only technical support available.		Conservation restrictions (CRs) are legal, enforceable agreements, authorized by the state, which are made between a landowner and a charitable organization, or a town. They are used primarily to keep land in a "natural or scenic open condition". Restrictions can be written so that certain uses are permitted and others prohibited, e.g. the current owner may continue to occupy an existing house on the land, but may restrict the construction of any additional houses. Grantors of restrictions may also be able to benefit by reductions in various taxes including property, estate and income.	High.	Depends on property owner
Property Acquisition	Drinking Water Supply Protection Grant Program	DEP	Estimated FY09 spending \$2,000,000. Average grant size upto \$290,500.	Public water systems and municipalities	Provides grants to assist public water systems and municipalities in acquiring land to protect the quality of public drinking water supplies.		Low to moderate. Average number of grants is 6.
Property Acquisition	Federal Land and Water Conservation Fund	EOEEA	Estimated FY09 funding amounts to be determined. Average grant size \$424,000	Municipal conservation commissions, park depts with current OSRP.	This program provides up to 50% reimbursement towards the cost of acquisition, development or renovation of recreation land, including the development of active recreation facilities.	Moderate	Moderate. Average number of grants typically 5.

Improvements	Forest Viability Program	DCR	Estimated funding for FY09 to be determined. Grant sizes \$19,700 to \$25,000	Non-industrial, private landowners that are engaged in forest based business under Chap. 61.	This program provides technical assistance and financial support to forest landowners for the purpose of improving the ecological integrity and economic viability of the state's 2.4 million acres of private forestland.		Average number of grants is 7. Low to moderate.
Management	Forestry Stewardship Program	DCR	Estimated funding for FY09 to be determined. Grant size \$1,230 to \$6,600.	Municipalities and private landowners	Encourages landowners to practice long-term guardianship through the development of a management plan for their woodlands.		Average number of grants 200.
Studies and Construction/Maintenance	SAFETEA-LU Regional Transportation Improvement Program	MHD, CMMPO	No maximum.		Funds are available for transportation related open space improvements. A bike path that connects dense areas of housing with employment or shopping centers would clearly fit the criteria. However, the state and the MPO have been relatively flexible about definitions and projects that are slightly less directly related to transportation may be eligible e.g., an open space parcel adjacent to a road programmed for repairs; the parcel provides a roadway rest area and access to walking trails.	Moderate with an appropriate project	Low
Studies and Construction/Maintenance	SAFETEA-LU Enhancement Program	MHD, CMMPO	None, but a \$100,000 minimum is requested by MHD.		Money is provided to a variety of transportation "enhancement" projects. Among those eligible are bikeways, walking paths and rail trails. This is a special dedicated fund that amounts to 10% of statewide spending from SAFETEA-LU monies.	Moderate	Low

Studies and Construction / Maintenance	Lake and Pond Grants	DCR	\$10,000.00		This program is the successor program to DEP's Clean Lakes Program (Chapter 628). Eligible activities include lake management analysis and planning, public education, and watershed and in-lake management techniques. The program requires a 50% cash match. Applications are due in November of each year.	Moderate	Moderate
Property Acquisition	LAND: Local Acquisitions for Natural Diversity Program (Formerly Self-Help Program)	EOEEA	Estimated FY09 \$5,000,000. Average grant size \$345,000.	Municipal conservation commissions, park depts with current OSRP.	The LAND program was established in 1961 to assist municipal conservation commissions acquiring land for natural resource and passive outdoor recreation purposes. Lands acquired may include wildlife, habitat, trails, unique natural, historic or cultural resources, water resources, forest, and farm land. Compatible passive outdoor recreational uses such as hiking, fishing, hunting, cross-country skiing, bird observation and the like are encouraged. Access by the general public including people with disabilities is required. This state program pays for the acquisition of land, or a partial interest (such as a conservation restriction), and associated acquisition costs such as appraisal reports and closing costs. A reimbursement program requiring the applicant to raise, borrow or appropriate the total project cost, and then be reimbursed a portion of that cost by the grant; Program requires a local investment and therefore only reimburses on a sliding scale to each municipality, from 52% to 70% of the total project cost up to a maximum grant limit set by the Secretary;	High	Moderate. Will depend on quality of town's application and level of competition. Average number of grants 20.
Improvements	Landowner Incentive Program	DFG	Estimated FY09 spending \$700,000. Average grant size \$5,000 to \$50,000	Private land-owners, sportsmen's clubs, land trusts, and non-profits.	The purpose of this program is to restore or create wildlife habitats for the benefit of species-at-risk on private lands in the Commonwealth of Massachusetts. The grants are intended to establish partnerships between the Massachusetts Division of Fisheries and Wildlife and private landowners.		Average number of grants 35.

Education	Mass Environmental Trust	EOEEA	Estimated FY09 spending \$950,000. Average grant size \$5,000 to \$50,000	Schools, municipalities, non-profits.	The Trust's mission is to develop, coordinate, and fund projects that encourage cooperative efforts to raise environmental awareness and enable innovative approaches that can restore, protect, and improve water and water related resources of the Commonwealth.		Average number of grants varies
Property Acquisition	MHD Open Space Program	EOTPW	None, but program receives only \$1M/year to be spread around the State.		This program acquires scenic areas adjacent to roadways. Funds are not available for recreation projects, though MHD has worked cooperatively with other state agencies and municipalities to assist in adjoining recreation projects. Scenic views and environmental protection are the two areas of program focus.	Low	Low, unless a great scenic resource is involved.
Property Acquisition	Municipal purchase	Municipality	Dependent on Town Meeting		This tool is probably the most direct and effective way for a town to achieve the acquisition objectives of its open space plan. Towns may either issue bonds to cover purchases or in some cases include a purchase item in the general budget. Bond issues are quite common and provide communities with the flexibility to negotiate with property owners, knowing that money has already been authorized to complete the acquisition. In practice, towns generally ask for authorization to float a bond to cover open space acquisition, and then once a deal has been negotiated return to town meeting for the actual appropriation.	High	Moderate. Will depend on a vigorous public outreach campaign prior to town meeting and the general referendum

Property Acquisition and improvements	PARC: Parkland Acquisitions and Renovations for Communities	EOEEA	Estimated FY09 spending \$8,000,000. Grant size \$50,000 to \$500,000.	Municipal conservation commissions, park depts with current OSRP.	Provides grant assistance to cities and towns to acquire parkland, develop new parks, or renovate existing outdoor public recreation facilities (formerly the Urban Self-Help Program). Any town with a population of 35,000 or more year-round residents, or any city regardless of size, that has an authorized park /recreation commission and conservation commission, is eligible to participate in the program. Communities that do not meet the population criteria listed above may still qualify under the "small town," "regional," or "statewide" project provisions of the program. Municipalities must have a current open space and recreation plan to apply, and the land must be open to the general public.		Average number of grants 21-25.
Development and Maintenance	Recreational Trails Program	DCR	Estimated funding for FY09 to be determined. Grant size \$2,000-\$50,000 (statewide projects).	Municipalities, government agencies, and non-profits	Provides funding support for a variety of motorized and non-motorized trail development and trail maintenance projects.		Average number of grants varies
Improvements	River and Harbors Grant Program	DCR	Estimated FY09 to be determined. Average grant size varies	Federal Cost share, municipalities and non-profits	Grants requiring matching funds for studies, surveys, design & engineering, environmental permitting and construction that addresses problems on coastal & inland waterways, lakes, ponds and great ponds. Grants are awarded in the following categories: 1) Coastal Waterways - for commercial and recreational navigation safety & to improve coastal habitat by improving tidal interchange; 2) Inland Waterways - to improve recreational use, water quality & wildlife habitats; 3) Erosion Control - to protect public facilities and reduce downstream sedimentation; 4) Flood Control - to reduce flood potentials.		Average number of grants varies

Restoration	Riverways Program Grants for River Restoration and Revitalization Priority Projects	DFG	Estimated FY09 to be determined. Average grant size \$5,000 to \$50,000.	Public agencies, non-profits including land trusts, watershed organizations for work on priority projects.	Program helps to restore the ecological integrity of rivers and streams throughout MA working in partnership with federal, state, and municipal governments, watershed associations and other organizations. Supports sustainable river restoration projects that restore natural processes, remove ecosystem stressors, increase the resilience of the ecosystem; support riverine habitat, promote passage of fish and wildlife through dam and other barrier removal. Support is also provided for urban stream revitalization projects that improve the interconnection between water quality, aquatic ecology, physical river structure and land use, taking into consideration the social, cultural and economic landscape.		Average number of grants varies
Restoration	Riverway's Stream Team Implementation Awards	DFG	Estimated FY09 to be determined. Grant size \$1,500-\$10,000.	Non-profits and municipal entities (conservation commissions, planning depts, etc) with associated Stream Teams.	Stream Team implementation awards are intended to restore ecological integrity of rivers by providing seed money for local projects that are identified by assessment, priority setting and action planning at the local level through the work of local Stream Teams (composed of municipal officials, residents, non-profit and business representatives), as well as providing for new assessments leading directly to implementation of river protection. Stream Teams are encouraged to work in partnership with watershed associations, land trusts, Conservation Commissions and other town boards.		Average number of grants varies
Studies and Construction/Maintenance	The National Recreational Trails Act (NRTA)	DCR	\$30,000		Part of the federal SAFETEA-LU, NRTA provides funds for trail projects. Eligible projects include: trail construction, land/easement acquisition, handicapped accessibility, interpretative areas/facilities, and education. Trails must be recreational, e.g. intra-city, on-road bikeways would probably not be eligible. There is no limit on grant funds, but a 50% local match is required (matching funds can be "non-cash"). Motorized and non-motorized trail use must be included in the grant with at least thirty percent of funds going to each activity.	Moderate	High with a good proposal

Protection and Management	Urban and Community Forestry Challenge Grants	DCR	Estimated FY09 spending \$200,000. Average grant size up to \$30,000.	Municipalities and non-profits	Assists in building support for the long term protection and management of community trees and forests; This program is a merger of 3 former separate grant programs: Heritage Tree Care, Mass Re-leaf, and Urban Forest Planning and Education.		Average number of grants varies.
CMMPO = Central Massachusetts Metropolitan Planning Organization (MPO)							
DAR = Massachusetts Department of Agricultural Resources (DAR)							
DCR = Massachusetts Department of Conservation and Recreation							
DCS = Massachusetts Division of Conservation Services							
DEP = Massachusetts Department of Environmental Protection							
DFG = Massachusetts Department of Fish and Game							
DOR = Massachusetts Department of Revenue							
EOEEA = Massachusetts Executive Office of Energy and Environmental Affairs							
EOTPW = Massachusetts Executive Office of Transportation and Public Works							
MHD = Massachusetts Highway Department							
SAFETEA-LU = Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users							

Appendix C - American with Disabilities Act (ADA) Section 504 Self Evaluation

Facility Inventory

LOCATION:

Town of Holden / Dawson Recreation Area

ACTIVITY	EQUIPMENT	NOTES
Picnic Facilities ☒ YES or ☐ NO	Benches : ☒ YES or ☐ NO	Located adjacent to accessible paths: ☒ YES or ☐ NO
		Access to Open Spaces: : ☒ YES or ☐ NO
	Grills : ☐ YES or ☐ NO	Back : ☒ YES or ☐ NO and Arm Rests : ☐ YES or ☒ NO
		Height of Cooking Surface:
	Trash Cans : ☒ YES or ☐ NO	Adequate number : ☒ YES or ☐ NO
		Located adjacent to accessible paths: ☒ YES or ☐ NO
Picnic Shelters: ☒ YES or ☒ NO	Located adjacent to accessible paths: ☒ YES or ☐ NO	
	Located near accessible water fountains, trash can, restroom, parking, etc. : ☒ YES or ☐ NO	
Trails ☐ YES or ☒ NO		Surface material
		Dimensions
		Rails: ☐ YES or ☐ NO
		Signage (for visually impaired) : ☐ YES or ☐ NO
Swimming Facilities ☒ YES or ☐ NO	Pools: ☒ YES or ☐ NO	Entrance
		Location from accessible parking
	Beaches ☒ YES or ☐ NO	Safety features i.e. warning for visually impaired
		Location from accessible path into water
		Handrails
		Location from accessible parking
Play Areas (tot lots) ☒ YES or ☐ NO	All Play Equipment i.e. swings, slides	Shade provided: : ☒ YES or ☐ NO
		Same experience provided to all: ☒ YES or ☐ NO
	Access Routes	Located adjacent to accessible paths ☒ YES or ☐ NO
		Enough space between equipment for wheelchair: ☒ YES or ☐ NO
Game Areas: *ballfield *basketball *tennis ☒ YES or ☐ NO	Access Routes	Located adjacent to accessible paths ☒ YES or ☐ NO
		Berm cuts onto courts: ☒ YES or ☐ NO
	Equipment	Height
		Dimensions
Spectator Seating: ☐ YES or ☒ NO		
	Boat Docks ☐ YES or ☒ NO	Access Routes
Handrails		
Fishing Facilities ☐ YES or ☒ NO	Access Routes	Located adjacent to accessible paths
		Handrails
	Equipment	Arm Rests: ☐ YES or ☐ NO
		Bait Shelves: ☐ YES or ☐ NO
		Handrails ☐ YES or ☐ NO
		Fish Cleaning Tables: ☐ YES or ☐ NO
Programming ☐ NO	Are special programs at your facilities accessible? ☒ YES or ☐ NO	Learn-to-Swim: ☒ YES or ☐ NO
		Guided Hikes: ☐ YES or ☒ NO
		Interpretive Programs: ☐ YES or ☒ NO
Services and Technical Assistance YES or ☒ NO	Information available in alternative formats i.e. for visually impaired	
		Process to request interpretive services (i.e. sign language interpreter) for meetings: ☐ YES or ☐ NO

LOCATION

PARKING, HANDICAP PARKING, ☒ YES or ☐ NO

Total Spaces	Required Accessible Spaces
Up to 25	1 space
26-50	2 spaces
51-75	3 spaces
76-100	4 spaces
101-150	5 spaces <i>8 Provided</i>
151-200	6 spaces
201-300	7 spaces
301-400	8 spaces
401-500	9 spaces

Specification for Accessible Spaces	Yes	No	Comments/Transition Notes
Accessible space located closest to accessible entrance	✓		
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.	✓		
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle	✓		
Van space - minimum of 1 van space for every accessible space, 8 ft wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.	✓		
Sign with international symbol of accessibility at each space or pair of spaces	✓		
Sign minimum 5 ft, maximum 8 ft to top of sign	✓		
Surface evenly paved or hard-packed (no cracks)	✓		
Surface slope less than 1:20, 5%	✓		
Curb cut to pathway from parking lot at each space or pair of spaces, if sidewalk (curb) is present	✓		
Curbcut is a minimum width of 3 ft, excluding sloped sides, has sloped sides, all slopes not to exceed 1:12, and textured or painted yellow	✓		

RAMPS ☒ YES or ☐ NO

Specification	Yes	No	Comments/Transition Notes
Slope Maximum 1:12	✓		
Minimum width 4 ft between handrails	✓		
Handrails on both sides if ramp is longer than 6 ft	✓		
Handrails at 34" and 19" from ramp surface	✓		
Handrails extend 12" beyond top and bottom	✓		
Handgrip oval or round	✓		
Handgrip smooth surface	✓		
Handgrip diameter between 1½" and 2"	✓		
Clearance of 1½" between wall and wall rail	✓		
Non-slip surface	✓		
Level platforms (4ft x 4 ft) at every 30 ft, at top, at bottom, at change of direction			NA

LOCATION

SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
Specification	Yes	No	Comments/Transition Notes
Site Access ☒ YES or ☐ NO			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance	✓		
Disembarking area at accessible entrance	✓		
Surface evenly paved or hard-packed	✓		
No ponding of water	✓		
Path of Travel ☒ YES or ☐ NO			
Path does not require the use of stairs		✓	
Path is stable, firm and slip resistant	✓		
3 ft wide minimum	✓		
Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50).	✓		
Continuous common surface, no changes in level greater than 1/4 inch	✓		
Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane	✓		
Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80"	✓		
Curb on the pathway must have curb cuts at drives, parking and drop-offs	✓		
Entrances ☒ YES or ☐ NO			
Primary public entrances accessible to person using wheelchair, must be signed, gotten to independently, and <i>not</i> be the service entrance	✓		
Level space extending 5 ft. from the door, interior and exterior of entrance doors	✓		
Minimum 32" clear width opening (i.e. 36" door with standard hinge)	✓		
At least 18" clear floor area on latch, pull side of door	✓		
Door handle no higher than 48" and operable with a closed fist	✓		
Vestibule is 4 ft plus the width of the door swinging into the space	NA		
Entrance(s) on a level that makes elevators accessible	NA		
Door mats less than 1/2" thick are securely fastened	NA		
Door mats more than 1/2" thick are recessed	NA		
Grates in path of travel have openings of 1/2" maximum	✓		
Signs at non-accessible entrance(s) indicate direction to accessible entrance	✓		
Emergency egress - alarms with flashing lights and audible signals, sufficiently lighted	✓		

NOTES

LOCATION

RESTROOMS - also see Doors and Vestibules ☒ YES or ☐ NO

Specification	Yes	No	Comments/Transition Notes
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5 ft turning space measured 12" from the floor	✓		
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At least one Sink: ☒ YES or ☐ NO

Clear floor space of 30" by 48" to allow a forward approach	✓		
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Mounted without pedestal or legs, height 34" to top of rim	✓		
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Extends at least 22" from the wall	✓		
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Open knee space a minimum 19" deep, 30" width, and 27" high	✓		
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Cover exposed pipes with insulation	✓		
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Faucets operable with closed fist (lever or spring activated handle)	✓		
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At least one Stall: ☒ YES or ☐ NO

Accessible to person using wheelchair at 60" wide by 72" deep	✓		
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Stall door is 36" wide	✓		
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Stall door swings out	✓		
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Stall door is self closing	✓		
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Stall door has a pull latch	✓		
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Lock on stall door is operable with a closed fist, and 32" above the floor	✓		
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Coat hook is 54" high	✓		
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Toilet

18" from center to nearest side wall	✓		
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42" minimum clear space from center to farthest wall or fixture	✓		
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Top of seat 17"-19" above the floor			
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Grab Bars

On back and side wall closest to toilet	✓		
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1½" diameter	✓		
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1½" clearance to wall	✓		
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Located 30" above and parallel to the floor	✓		
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Acid-etched or roughened surface	✓		
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42" long	✓		
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Fixtures

Toilet paper dispenser is 24" above floor	✓		
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One mirror set a maximum 38" to bottom (if tilted, 42")	✓		
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Dispensers (towel, soap, etc) at least one of each a maximum 42" above the floor	✓		
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NOTES

LOCATION

FLOORS, DRINKING FOUNTAINS, TELEPHONES ☒ YES or ☐ NO

Specification	Yes	No	Comments/Transition Notes
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Floors

Non-slip surface

Carpeting is high-density, low pile, non-absorbent, stretched taut, securely anchored

Corridor width minimum is 3 ft

Objects (signs, ceiling lights, fixtures) can only protrude 4" into the path of travel from a height of 27" to 80" above the floor

Drinking Fountains: ☒ YES or ☒ NO

Spouts no higher than 36" from floor to outlet

Hand operated push button or level controls

Spouts located near front with stream of water as parallel to front as possible

If recessed, recess a minimum 30" width, and no deeper than depth of fountain

If no clear knee space underneath, clear floor space 30" x 48" to allow parallel approach

Telephones: ☐ YES or ☒ NO

Highest operating part a maximum 54" above the floor

Access within 12" of phone, 30" high by 30" wide

Adjustable volume control on headset so identified

SIGNS, SIGNALS, AND SWITCHES: ☐ YES or ☐ NO

Specification	Yes	No	Comments/Transition Notes
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Switches, Controls and Signs ☒ YES or ☐ NO

Switches and controls for light, heat, ventilation, windows, fire alarms, thermostats, etc, must be a minimum of 36" and a maximum of 48" above the floor for a forward reach, a maximum of 54" for a side reach

Electrical outlets centered no lower than 18" above the floor

Warning signals must be visual as well as audible

Signs ☒ YES or ☐ NO

Mounting height must be 60" to centerline of the sign

Within 18" of door jamb or recessed

Letters and numbers a t least 1½" high

Letters and numbers raised .03"

Letters and numbers contrast with the background color

NOTES

LOCATION

STAIRS and DOORS ☒ YES or ☐ NO

Specification Yes No Comments/Transition Notes

Stairs ☒ YES or ☐ NO

No open risers

✓

Nosings not projecting

✓

Treads no less than 11" wide

✓

Handrails on both sides

✓

Handrails 34"-38" above tread

✓

Handrail extends a minimum of 1 ft beyond top and bottom riser (if no safety hazard and space permits)

✓

Handgrip oval or round

✓

Handgrip has a smooth surface

✓

Handgrip diameter between 1¼" and 1½"

✓

1½" clearance between wall and handrail

✓

Doors ☒ YES or ☐ NO

Minimum 32" clear opening

✓

At least 18" clear floor space on pull side of door

✓

Closing speed minimum 3 seconds to within 3" of the latch

✓

Maximum pressure 5 pounds interior doors

✓

Threshold maximum ½" high, beveled on both sides

✓

Hardware operable with a closed fist (no conventional door knobs or thumb latch devices)

✓

Hardware minimum 36", maximum 48" above the floor

✓

Clear, level floor space extends out 5 ft from both sides of the door

✓

Door adjacent to revolving door is accessible and unlocked

NA

Doors opening into hazardous area have hardware that is knurled or roughened

✓

NOTES

LOCATION

SWIMMING POOLS - accessibility can be via ramp, lifting device, or transfer area ☒ YES or ☐ NO			
Specification	Yes	No	Comments/Transition Notes
Ramp at least 34" wide with a non-slip surface extending into the shallow end, slope not exceeding 1:6 with handrails on both sides	✓		
Lifting device	✓		
Transfer area 18" above the path of travel and a minimum of 18" wide	✓		
Unobstructed path of travel not less than 48" wide around pool			
Non-slip surface	✓		

LOCATION

SHOWER ROOMS - Showers must accommodate both wheel-in and transfer use ☒ YES or ☐ NO			
Specification	Yes	No	Comments/Transition Notes
Stalls 36" by 60" minimum, with a 36" door opening	✓		
Floors are pitched to drain the stall at the corner farthest from entrance	✓		
Floors are non-slip surface	✓		
Controls operate by a single lever with a pressure balance mixing valve	✓		
Controls are located on the center wall adjacent to the hinged seat	✓		
Shower heads attached to a flexible metal hose	✓		
Shower heads attached to wall mounting adjustable from 42" to 72" above the floor	✓		
Seat is hinged and padded and at least 16" deep, folds upward, securely attached to side wall, height is 18" to the top of the seat, and at least 24" long	✓		
Soap trays without handhold features unless they can support 250 pounds	✓		
2 grab bars are provided, one 30" and one 48" long, or one continuous L shaped bar	✓		
Grab bars are placed horizontally at 36" above the floor line	✓		

LOCATION

PICNICKING ☒ YES or ☐ NO			
Specification	Yes	No	Comments/Transition Notes
A minimum of 5% of the total tables must be accessible with clear space under the table top not less than 30" wide and 19" deep per seating space and not less than 27" clear from the ground to the underside of the table. An additional 29" clear space (totaling 48") must extend beyond the 19" clear space under the table to provide access	✓		
For tables without toe clearance, the knee space under the table must be at least 28" high, 30" wide and 24" deep.	✓		
Top of table no higher than 32" above ground	✓		
Surface of the clear ground space under and around the table must be stable, firm and slip-resistant, and evenly graded with a maximum slope of 2% in all directions	✓		
Accessible tables, grills and fire rings must have clear ground space of at least 36" around the perimeter	✓		

Facility Inventory

LOCATION:

Town of Holden EAGLE LAKE REC AREA

ACTIVITY	EQUIPMENT	NOTES
Picnic Facilities ☐ YES or ☒ NO	Benches: ☒ YES or ☐ NO	Located adjacent to accessible paths: ☒ YES or ☐ NO
		Access to Open Spaces: ☒ YES or ☐ NO
	Grills: ☐ YES or ☒ NO	Back: ☒ YES or ☐ NO and Arm Rests: ☐ YES or ☒ NO
		Adequate number: ☐ YES or ☐ NO
		Height of Cooking Surface:
Trails ☒ YES or ☐ NO	Trash Cans: ☒ YES or ☐ NO	Located adjacent to accessible paths: ☒ YES or ☐ NO
	Picnic Shelters: ☐ YES or ☒ NO	Located adjacent to accessible paths: ☐ YES or ☐ NO
		Located near accessible water fountains, trash can, restroom, parking, etc.: ☐ YES or ☐ NO
		Surface material - <i>wooded trail</i>
Swimming Facilities ☒ YES or ☐ NO	Pools: ☐ YES or ☐ NO	Dimensions
	Beaches: ☒ YES or ☐ NO	Rails: ☐ YES or ☒ NO
		Signage (for visually impaired): ☐ YES or ☒ NO
		Entrance
		Location from accessible parking
Play Areas (tot lots) ☐ YES or ☐ NO	All Play Equipment i.e. swings, slides	Safety features i.e. warning for visually impaired
	Access Routes	Location from accessible path into water: <i>yes</i>
		Handrails: <i>NO</i>
Game Areas: *ballfield *basketball *tennis ☒ YES or ☐ NO	Access Routes	Location from accessible parking: <i>yes</i>
	Equipment	Shade provided: ☒ YES or ☐ NO
		Same experience provided to all: ☒ YES or ☐ NO
		Located adjacent to accessible paths: ☒ YES or ☐ NO
Boat Docks ☐ YES or ☒ NO	Access Routes	Enough space between equipment for wheelchair: ☒ YES or ☐ NO
	Handrails	
Fishing Facilities ☒ YES or ☐ NO	Access Routes	Located adjacent to accessible paths: <i>yes</i>
	Equipment	Handrails
		Arm Rests: ☐ YES or ☒ NO
		Bait Shelves: ☐ YES or ☒ NO
Programming ☐ YES or ☒ NO	Are special programs at your facilities accessible? ☐ YES or ☐ NO	Handrails: ☐ YES or ☒ NO
		Fish Cleaning Tables: ☐ YES or ☒ NO
		Learn-to-Swim: ☐ YES or ☐ NO
Services and Technical Assistance ☐ YES or ☒ NO	Information available in alternative formats i.e. for visually impaired	Guided Hikes: ☐ YES or ☐ NO
		Interpretive Programs: ☐ YES or ☐ NO
		Process to request interpretive services (i.e. sign language interpreter) for meetings: ☐ YES or ☐ NO

LOCATION
PARKING, HANDICAP PARKING, ☒ YES or ☐ NO

<i>Total Spaces</i>	<i>Required Accessible Spaces</i>		
Up to 25 ✓	1 space ✓		
26-50	2 spaces		
51-75	3 spaces		
76-100	4 spaces		
101-150	5 spaces		
151-200	6 spaces		
201-300	7 spaces		
301-400	8 spaces		
401-500	9 spaces		
<i>Specification for Accessible Spaces</i>	<i>Yes</i>	<i>No</i>	<i>Comments/Transition Notes</i>
Accessible space located closest to accessible entrance	✓		
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.	✓		
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle	✓		
Van space - minimum of 1 van space for every accessible space, 8 ft wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.	✓		
Sign with international symbol of accessibility at each space or pair of spaces		✓	
Sign minimum 5 ft, maximum 8 ft to top of sign		✓	
Surface evenly paved or hard-packed (no cracks)	✓		
Surface slope less than 1:20, 5%	✓		
Curb cut to pathway from parking lot at each space or pair of spaces, if sidewalk (curb) is present	✓		
Curbcut is a minimum width of 3 ft, excluding sloped sides, has sloped sides, all slopes not to exceed 1:12, and textured or painted yellow	✓		
RAMPS ☐ YES or ☒ NO <i>PARKING IS FLAT Surface w/o Berm</i>			
<i>Specification</i>	<i>Yes</i>	<i>No</i>	<i>Comments/Transition Notes</i>
Slope Maximum 1:12			
Minimum width 4 ft between handrails			
Handrails on both sides if ramp is longer than 6 ft			
Handrails at 34" and 19" from ramp surface			
Handrails extend 12" beyond top and bottom			
Handgrip oval or round			
Handgrip smooth surface			
Handgrip diameter between 1½" and 2"			
Clearance of 1½" between wall and wall rail			
Non-slip surface			
Level platforms (4ft x 4 ft) at every 30 ft, at top, at bottom, at change of direction			

LOCATION

SITE ACCESS, PATH OF TRAVEL, ENTRANCES

Specification	Yes	No	Comments/Transition Notes
Site Access ☒ YES or ☐ NO			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance	✓		
Disembarking area at accessible entrance	✓		
Surface evenly paved or hard-packed	✓		
No ponding of water	✓		
Path of Travel ☒ YES or ☐ NO			
Path does not require the use of stairs		✓	
Path is stable, firm and slip resistant	✓		
3 ft wide minimum	✓		
Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50).	✓		
Continuous common surface, no changes in level greater than 1/2 inch	✓		
Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane	✓		
Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80"	✓		
Curb on the pathway must have curb cuts at drives, parking and drop-offs	✓		
Entrances ☒ YES or ☐ NO			
Primary public entrances accessible to person using wheelchair, must be signed, gotten to independently, and <i>not</i> be the service entrance	✓		
Level space extending 5 ft. from the door, interior and exterior of entrance doors	✓		
Minimum 32" clear width opening (i.e. 36" door with standard hinge)	✓		
At least 18" clear floor area on latch, pull side of door	✓		
Door handle no higher than 48" and operable with a closed fist	✓		
Vestibule is 4 ft plus the width of the door swinging into the space	—		
Entrance(s) on a level that makes elevators accessible	—		
Door mats less than 1/2" thick are securely fastened	✓		
Door mats more than 1/2" thick are recessed	—		
Grates in path of travel have openings of 1/2" maximum	—		
Signs at non-accessible entrance(s) indicate direction to accessible entrance		✓	
Emergency egress - alarms with flashing lights and audible signals, sufficiently lighted	✓		

NOTES

LOCATION

RESTROOMS - also see Doors and Vestibules ☒ YES or ☐ NO			
Specification	Yes	No	Comments/Transition Notes
5 ft turning space measured 12" from the floor	☒		
At least one Sink: ☒ YES or ☐ NO			
Clear floor space of 30" by 48" to allow a forward approach	☒		
Mounted without pedestal or legs, height 34" to top of rim	☒		
Extends at least 22" from the wall	☒		
Open knee space a minimum 19" deep, 30" width, and 27" high	☒		
Cover exposed pipes with insulation	☒		
Faucets operable with closed fist (lever or spring activated handle)	☒		
At least one Stall: ☒ YES or ☐ NO			
Accessible to person using wheelchair at 60" wide by 72" deep	☒		
Stall door is 36" wide	☒		
Stall door swings out	☒		
Stall door is self closing	☒		
Stall door has a pull latch	☒		
Lock on stall door is operable with a closed fist, and 32" above the floor	☒		
Coat hook is 54" high	☒		
Toilet			
18" from center to nearest side wall	☒		
42" minimum clear space from center to farthest wall or fixture	☒		
Top of seat 17"-19" above the floor	☒		
Grab Bars			
On back and side wall closest to toilet	☒		
1½" diameter	☒		
1½" clearance to wall	☒		
Located 30" above and parallel to the floor	☒		
Acid-etched or roughened surface	☒		
42" long	☒		
Fixtures			
Toilet paper dispenser is 24" above floor	☒		
One mirror set a maximum 38" to bottom (if tilted, 42")	☒		
Dispensers (towel, soap, etc) at least one of each a maximum 42" above the floor	☒		

NOTES

LOCATION NO NO			
FLOORS, DRINKING FOUNTAINS, TELEPHONES ☒ YES or ☐ NO			
Specification	Yes	No	Comments/Transition Notes
Floors			
Non-slip surface	☒		
Carpeting is high-density, low pile, non-absorbent, stretched taut, securely anchored	☒		
Corridor width minimum is 3 ft	☒		
Objects (signs, ceiling lights, fixtures) can only protrude 4" into the path of travel from a height of 27" to 80" above the floor	☒		
Drinking Fountains: ☐ YES or ☒ NO			
Spouts no higher than 36" from floor to outlet			
Hand operated push button or level controls			
Spouts located near front with stream of water as parallel to front as possible			
If recessed, recess a minimum 30" width, and no deeper than depth of fountain			
If no clear knee space underneath, clear floor space 30" x 48" to allow parallel approach			
Telephones: ☐ YES or ☒ NO			
Highest operating part a maximum 54" above the floor			
Access within 12" of phone, 30" high by 30" wide			
Adjustable volume control on headset so identified			
SIGNS, SIGNALS, AND SWITCHES: ☒ YES or ☐ NO			
Specification	Yes	No	Comments/Transition Notes
Switches, Controls and Signs ☒ YES or ☐ NO			
Switches and controls for light, heat, ventilation, windows, fire alarms, thermostats, etc, must be a minimum of 36" and a maximum of 48" above the floor for a forward reach, a maximum of 54" for a side reach	☒		
Electrical outlets centered no lower than 18" above the floor	☒		
Warning signals must be visual as well as audible	☒		
Signs ☐ YES or ☒ NO			
Mounting height must be 60" to centerline of the sign			
Within 18" of door jamb or recessed			
Letters and numbers at least 1 1/4" high			
Letters and numbers raised .03"			
Letters and numbers contrast with the background color			

NOTES

LOCATION

STAIRS and DOORS ☒ YES or ☐ NO			
Specification	Yes	No	Comments/Transition Notes
Stairs ☐ YES or ☒ NO			
No open risers			
Nosings not projecting			
Treads no less than 11" wide			
Handrails on both sides			
Handrails 34"-38" above tread			
Handrail extends a minimum of 1 ft beyond top and bottom riser (if no safety hazard and space permits)			
Handgrip oval or round			
Handgrip has a smooth surface			
Handgrip diameter between 1¼" and 1½"			
1½" clearance between wall and handrail			
Doors ☒ YES or ☐ NO			
Minimum 32" clear opening	✓		
At least 18" clear floor space on pull side of door	✓		
Closing speed minimum 3 seconds to within 3" of the latch	—		
Maximum pressure 5 pounds interior doors	—		
Threshold maximum ½" high, beveled on both sides	✓		
Hardware operable with a closed fist (no conventional door knobs or thumb latch devices)	✓		
Hardware minimum 36", maximum 48" above the floor	✓		
Clear, level floor space extends out 5 ft from both sides of the door	✓		
Door adjacent to revolving door is accessible and unlocked	—		
Doors opening into hazardous area have hardware that is knurled or roughened	—		

NOTES

LOCATION

SWIMMING POOLS - accessibility can be via ramp, lifting device, or transfer area ☐ YES or ☒ NO			
Specification	Yes	No	Comments/Transition Notes
Ramp at least 34" wide with a non-slip surface extending into the shallow end, slope not exceeding 1:6 with handrails on both sides			
Lifting device			
Transfer area 18" above the path of travel and a minimum of 18" wide			
Unobstructed path of travel not less than 48" wide around pool			
Non-slip surface			

LOCATION

SHOWER ROOMS - Showers must accommodate both wheel-in and transfer use ☒ YES or ☒ NO			
Specification	Yes	No	Comments/Transition Notes
Stalls 36" by 60" minimum, with a 36" door opening	☒		
Floors are pitched to drain the stall at the corner farthest from entrance	☒		
Floors are non-slip surface	☒		
Controls operate by a single lever with a pressure balance mixing valve			
Controls are located on the center wall adjacent to the hinged seat			
Shower heads attached to a flexible metal hose			
Shower heads attached to wall mounting adjustable from 42" to 72" above the floor			
Seat is hinged and padded and at least 16" deep, folds upward, securely attached to side wall, height is 18" to the top of the seat, and at least 24" long			
Soap trays without handhold features unless they can support 250 pounds			
2 grab bars are provided, one 30" and one 48" long, or one continuous L shaped bar			
Grab bars are placed horizontally at 36" above the floor line			

LOCATION

PICNICKING ☐ YES or ☒ NO			
Specification	Yes	No	Comments/Transition Notes
A minimum of 5% of the total tables must be accessible with clear space under the table top not less than 30" wide and 19" deep per seating space and not less than 27" clear from the ground to the underside of the table. An additional 29" clear space (totaling 48") must extend beyond the 19" clear space under the table to provide access			
For tables without toe clearance, the knee space under the table must be at least 28" high, 30" wide and 24" deep.			
Top of table no higher than 32" above ground			
Surface of the clear ground space under and around the table must be stable, firm and slip-resistant, and evenly graded with a maximum slope of 2% in all directions			
Accessible tables, grills and fire rings must have clear ground space of at least 36" around the perimeter			

Facility Inventory

LOCATION:

Town of Holden / TROUT BROOK RESERVATION

ACTIVITY	EQUIPMENT	NOTES
Picnic Facilities ☒ YES or ☐ NO	Benches: ☒ YES or ☐ NO	Located adjacent to accessible paths: ☒ YES or ☐ NO Access to Open Spaces: ☒ YES or ☐ NO Back: ☒ YES or ☐ NO and Arm Rests: ☐ YES or ☒ NO Adequate number: ☒ YES or ☐ NO
	Grills: ☒ YES or ☐ NO	Height of Cooking Surface: <u>30 inches</u> Located adjacent to accessible paths: ☒ YES or ☐ NO
	Trash Cans: ☒ YES or ☐ NO	Located adjacent to accessible paths: ☒ YES or ☐ NO
	Picnic Shelters: ☒ YES or ☐ NO	Located adjacent to accessible paths: ☒ YES or ☐ NO Located near accessible water fountains, trash can, restroom, parking, etc.: ☒ YES or ☐ NO
Trails ☒ YES or ☐ NO		Surface material: <u>PACKED GRAVEL</u> Dimensions: <u>VARS</u> Rails: ☐ YES or ☒ NO Signage (for visually impaired): ☐ YES or ☒ NO
Swimming Facilities ☐ YES or ☒ NO	Pools: ☐ YES or ☐ NO	Entrance Location from accessible parking Safety features i.e. warning for visually impaired
	Beaches: ☐ YES or ☐ NO	Location from accessible path into water Handrails Location from accessible parking Shade provided: ☐ YES or ☐ NO
Play Areas (tot lots) ☐ YES or ☒ NO	All Play Equipment i.e. swings, slides	Same experience provided to all: ☐ YES or ☐ NO
	Access Routes	Located adjacent to accessible paths: ☐ YES or ☐ NO Enough space between equipment for wheelchair: ☐ YES or ☐ NO
Game Areas: *ballfield *basketball *tennis ☐ YES or ☒ NO	Access Routes	Located adjacent to accessible paths: ☐ YES or ☐ NO Berm cuts onto courts: ☐ YES or ☐ NO
	Equipment	Height Dimensions Spectator Seating: ☐ YES or ☐ NO
Boat Docks ☐ YES or ☒ NO	Access Routes	Located adjacent to accessible paths Handrails
Fishing Facilities ☒ YES or ☐ NO	Access Routes	Located adjacent to accessible paths: ☒ Handrails: <u>NO</u>
	Equipment	Arm Rests: ☐ YES or ☒ NO Bait Shelves: ☐ YES or ☒ NO Handrails: ☐ YES or ☒ NO Fish Cleaning Tables: ☐ YES or ☒ NO
Programming ☐ YES or ☒ NO	Are special programs at your facilities accessible? ☐ YES or ☐ NO	Learn-to-Swim: ☐ YES or ☐ NO
		Guided Hikes: ☐ YES or ☐ NO
		Interpretive Programs: ☐ YES or ☐ NO
Services and Technical Assistance ☐ YES or ☒ NO	Information available in alternative formats i.e. for visually impaired	
	Process to request interpretive services (i.e. sign language interpreter) for meetings: ☐ YES or ☐ NO	

LOCATION

PARKING, HANDICAP PARKING, ☐ YES or ☐ NO

Total Spaces	Required Accessible Spaces		
Up to 25	1 space		
26-50	2 spaces		
51-75	3 spaces		
76-100	4 spaces		
101-150	5 spaces		
151-200	6 spaces		
201-300	7 spaces		
301-400	8 spaces		
401-500	9 spaces		

Specification for Accessible Spaces	Yes	No	Comments/Transition Notes
Accessible space located closest to accessible entrance	✓		
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.	✓		
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle	✓		
Van space - minimum of 1 van space for every accessible space, 8 ft wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.	✓		
Sign with international symbol of accessibility at each space or pair of spaces		✓	
Sign minimum 5 ft, maximum 8 ft to top of sign		✓	
Surface evenly paved or hard-packed (no cracks)	✓		
Surface slope less than 1:20, 5%	✓		
Curb cut to pathway from parking lot at each space or pair of spaces, if sidewalk (curb) is present	NA		All Flat
Curbcut is a minimum width of 3 ft, excluding sloped sides, has sloped sides, all slopes not to exceed 1:12, and textured or painted yellow	No		"

RAMPS ☐ YES or ☒ NO

Specification	Yes	No	Comments/Transition Notes
Slope Maximum 1:12			
Minimum width 4 ft between handrails			
Handrails on both sides if ramp is longer than 6 ft			
Handrails at 34" and 19" from ramp surface			
Handrails extend 12" beyond top and bottom			
Handgrip oval or round			
Handgrip smooth surface			
Handgrip diameter between 1½" and 2"			
Clearance of 1½" between wall and wall rail			
Non-slip surface			
Level platforms (4ft x 4 ft) at every 30 ft, at top, at bottom, at change of direction			

LOCATION

SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
Specification	Yes	No	Comments/Transition Notes
Site Access ☒ YES or ☐ NO			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance	✓		
Disembarking area at accessible entrance	✓		
Surface evenly paved or hard-packed	✓		
No ponding of water	✓		
Path of Travel ☒ YES or ☐ NO			
Path does not require the use of stairs		✓	
Path is stable, firm and slip resistant	✓		
3 ft wide minimum	✓		
Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50).	✓		
Continuous common surface, no changes in level greater than $\frac{1}{2}$ inch	✓		
Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane	—		
Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80"	—		
Curb on the pathway must have curb cuts at drives, parking and drop-offs	✓		
Entrances ☐ YES or ☒ NO			
Primary public entrances accessible to person using wheelchair, must be signed, gotten to independently, and <i>not</i> be the service entrance			
Level space extending 5 ft. from the door, interior and exterior of entrance doors			
Minimum 32" clear width opening (i.e. 36" door with standard hinge)			
At least 18" clear floor area on latch, pull side of door			
Door handle no higher than 48" and operable with a closed fist			
Vestibule is 4 ft plus the width of the door swinging into the space			
Entrance(s) on a level that makes elevators accessible			
Door mats less than $\frac{1}{2}$ " thick are securely fastened			
Door mats more than $\frac{1}{2}$ " thick are recessed			
Grates in path of travel have openings of $\frac{1}{2}$ " maximum			
Signs at non-accessible entrance(s) indicate direction to accessible entrance			
Emergency egress - alarms with flashing lights and audible signals, sufficiently lighted			

NOTES

LOCATION

RESTROOMS - also see Doors and Vestibules ☒ YES or ☐ NO

Specification	Yes	No	Comments/Transition Notes
5 ft turning space measured 12" from the floor	☒		
At least one Sink: ☒ YES or ☐ NO			
Clear floor space of 30" by 48" to allow a forward approach	☒		
Mounted without pedestal or legs, height 34" to top of rim	☒		
Extends at least 22" from the wall	☒		
Open knee space a minimum 19" deep, 30" width, and 27" high	☒		
Cover exposed pipes with insulation	☒		
Faucets operable with closed fist (lever or spring activated handle)	☒		
At least one Stall: ☒ YES or ☐ NO			
Accessible to person using wheelchair at 60" wide by 72" deep	☒		
Stall door is 36" wide	☒		
Stall door swings out	☒		
Stall door is self closing	☒		
Stall door has a pull latch	☒		
Lock on stall door is operable with a closed fist, and 32" above the floor	☒		
Coat hook is 54" high	☒		
Toilet			
18" from center to nearest side wall	☒		
42" minimum clear space from center to farthest wall or fixture	☒		
Top of seat 17"-19" above the floor	☒		
Grab Bars			
On back and side wall closest to toilet	☒		
1½" diameter	☒		
1½" clearance to wall	☒		
Located 30" above and parallel to the floor	☒		
Acid-etched or roughened surface	☒		
42" long	☒		
Fixtures			
Toilet paper dispenser is 24" above floor	☒		
One mirror set a maximum 38" to bottom (if tilted, 42")	☒		
Dispensers (towel, soap, etc) at least one of each a maximum 42" above the floor	☒		

NOTES

LOCATION

FLOORS, DRINKING FOUNTAINS, TELEPHONES ☐ YES or ☒ NO			
Specification	Yes	No	Comments/Transition Notes
Floors			
Non-slip surface			
Carpeting is high-density, low pile, non-absorbent, stretched taut, securely anchored			
Corridor width minimum is 3 ft			
Objects (signs, ceiling lights, fixtures) can only protrude 4" into the path of travel from a height of 27" to 80" above the floor			
Drinking Fountains: ☐ YES or ☒ NO			
Spouts no higher than 36" from floor to outlet			
Hand operated push button or level controls			
Spouts located near front with stream of water as parallel to front as possible			
If recessed, recess a minimum 30" width, and no deeper than depth of fountain			
If no clear knee space underneath, clear floor space 30" x 48" to allow parallel approach			
Telephones: ☐ YES or ☒ NO			
Highest operating part a maximum 54" above the floor			
Access within 12" of phone, 30" high by 30" wide			
Adjustable volume control on headset so identified			
SIGNS, SIGNALS, AND SWITCHES: ☐ YES or ☐ NO			
Specification	Yes	No	Comments/Transition Notes
Switches, Controls and Signs ☒ YES or ☐ NO			
Switches and controls for light, heat, ventilation, windows, fire alarms, thermostats, etc, must be a minimum of 36" and a maximum of 48" above the floor for a forward reach, a maximum of 54" for a side reach	✓		
Electrical outlets centered no lower than 18" above the floor	✓		
Warning signals must be visual as well as audible	✓		
Signs ☐ YES or ☒ NO			
Mounting height must be 60" to centerline of the sign			
Within 18" of door jamb or recessed			
Letters and numbers at least 1½" high			
Letters and numbers raised .03"			
Letters and numbers contrast with the background color			

NOTES

LOCATION

STAIRS and DOORS ☒ YES or ☐ NO			
Specification	Yes	No	Comments/Transition Notes
Stairs ☐ YES or ☒ NO			
No open risers			
Nosings not projecting			
Treads no less than 11" wide			
Handrails on both sides			
Handrails 34"-38" above tread			
Handrail extends a minimum of 1 ft beyond top and bottom riser (if no safety hazard and space permits)			
Handgrip oval or round			
Handgrip has a smooth surface			
Handgrip diameter between 1 $\frac{1}{4}$ " and 1 $\frac{1}{2}$ "			
1 $\frac{1}{2}$ " clearance between wall and handrail			
Doors ☒ YES or ☐ NO			
Minimum 32" clear opening	✓		
At least 18" clear floor space on pull side of door	✓		
Closing speed minimum 3 seconds to within 3" of the latch	✓		
Maximum pressure 5 pounds interior doors	✓		
Threshold maximum $\frac{1}{2}$ " high, beveled on both sides	✓		
Hardware operable with a closed fist (no conventional door knobs or thumb latch devices)	✓		
Hardware minimum 36", maximum 48" above the floor	✓		
Clear, level floor space extends out 5 ft from both sides of the door	✓		
Door adjacent to revolving door is accessible and unlocked			
Doors opening into hazardous area have hardware that is knurled or roughened			

NOTES

LOCATION

SWIMMING POOLS - accessibility can be via ramp, lifting device, or transfer area ☐ YES or ☒ NO			
Specification	Yes	No	Comments/Transition Notes
Ramp at least 34" wide with a non-slip surface extending into the shallow end, slope not exceeding 1:6 with handrails on both sides			
Lifting device			
Transfer area 18" above the path of travel and a minimum of 18" wide			
Unobstructed path of travel not less than 48" wide around pool			
Non-slip surface			

LOCATION

SHOWER ROOMS - Showers must accommodate both wheel-in and transfer use ☐ YES or ☒ NO			
Specification	Yes	No	Comments/Transition Notes
Stalls 36" by 60" minimum, with a 36" door opening			
Floors are pitched to drain the stall at the corner farthest from entrance			
Floors are non-slip surface			
Controls operate by a single lever with a pressure balance mixing valve			
Controls are located on the center wall adjacent to the hinged seat			
Shower heads attached to a flexible metal hose			
Shower heads attached to wall mounting adjustable from 42" to 72" above the floor			
Seat is hinged and padded and at least 16" deep, folds upward, securely attached to side wall, height is 18" to the top of the seat, and at least 24" long			
Soap trays without handhold features unless they can support 250 pounds			
2 grab bars are provided, one 30" and one 48" long, or one continuous L shaped bar			
Grab bars are placed horizontally at 36" above the floor line			

LOCATION

PICNICKING ☒ YES or ☐ NO			
Specification	Yes	No	Comments/Transition Notes
A minimum of 5% of the total tables must be accessible with clear space under the table top not less than 30" wide and 19" deep per seating space and not less than 27" clear from the ground to the underside of the table. An additional 29" clear space (totaling 48") must extend beyond the 19" clear space under the table to provide access	✓		
For tables without toe clearance, the knee space under the table must be at least 28" high, 30" wide and 24" deep.	✓		
Top of table no higher than 32" above ground	✓		
Surface of the clear ground space under and around the table must be stable, firm and slip-resistant, and evenly graded with a maximum slope of 2% in all directions	✓		
Accessible tables, grills and fire rings must have clear ground space of at least 36" around the perimeter	✓		

Appendix D – Fall 2008 Community Survey Results

Holden Open Space and Recreation Survey

1. Do you feel there is a need to preserve open space and natural areas in Holden?			
		Response Percent	Response Count
Yes		97.9%	94
No		2.1%	2
	answered question		96
	skipped question		10

2. How important is it to you to preserve the following:						
	Very important	Important	Neutral	Less important	Not important	Response Count
Buildings of historical or architectural interest	34.6% (36)	44.2% (46)	11.5% (12)	8.7% (9)	1.0% (1)	104
Places of historical value	38.5% (40)	43.3% (45)	12.5% (13)	4.8% (5)	1.0% (1)	104
Farmlands	39.4% (41)	41.3% (43)	13.5% (14)	5.8% (6)	0.0% (0)	104
Open spaces to meet our water and conservation needs	76.9% (80)	18.3% (19)	1.0% (1)	3.8% (4)	0.0% (0)	104
Open spaces to meet our recreational needs	60.6% (63)	30.8% (32)	4.8% (5)	3.8% (4)	0.0% (0)	104
Open spaces for aesthetics or passive recreation	50.0% (52)	36.5% (38)	5.8% (6)	6.7% (7)	1.0% (1)	104
	answered question					104
	skipped question					2

3. To preserve Open Spaces in town, would you				
	Yes	No	Not sure	Response Count
Contribute some land to the town, state, or land trust (non-profit)	20.4% (20)	48.0% (47)	31.6% (31)	98
Donate money to buy land	36.0% (36)	38.0% (38)	26.0% (26)	100
Rewrite your deed to limit future development of your land	36.7% (36)	37.8% (37)	25.5% (25)	98
Sell land to the town at a "bargain price"	7.1% (7)	56.1% (55)	36.7% (36)	98
Sell or contribute a conservation restriction to protect your land from future development	44.3% (43)	25.8% (25)	29.9% (29)	97
Sell some land to the town for "fair market value"	35.7% (35)	32.7% (32)	31.6% (31)	98
Vote for a town-supported land acquisition program	57.3% (59)	15.5% (16)	27.2% (28)	103
Vote to raise town taxes to fund land acquisition programs.	28.2% (29)	41.7% (43)	30.1% (31)	103
Other (please specify)				3
	answered question			104
	skipped question			2

4. What Town actions do you favor to preserve open space?			
		Response Percent	Response Count
Combination of public and private action		76.5%	75
Help citizens conserve their land or by receipt of conservation restrictions.		65.3%	64
Town purchase of land		55.1%	54
Zoning for open space conservation		76.5%	75
Mandatory dedication of open space by developers		78.6%	77
Other (please specify)			4
<i>answered question</i>			98
<i>skipped question</i>			8

5. What State actions do you favor to preserve open space?			
		Response Percent	Response Count
Outright purchase of land		64.9%	61
Purchase of development rights		44.7%	42
Property tax reduction programs for farm, forest and recreation land		79.8%	75
Other (please specify)			2
<i>answered question</i>			94
<i>skipped question</i>			12

6. Please answer the following:				
	Yes	No	Not sure	Response Count
Are you satisfied with the places for children and youth to play and recreate in town?	60.0% (57)	33.7% (32)	6.3% (6)	95
Are you satisfied with the places for adults to play and recreate in town?	44.8% (43)	38.5% (37)	16.7% (16)	96
Are you satisfied with the general condition of these facilities?	55.8% (53)	23.2% (22)	21.1% (20)	95
Comments				19
	answered question			96
	skipped question			10

7. Please check the top 5 recreational facilities you feel are needed:		
	The top five facilities I feel are needed.	Response Count
Bike trails	100.0% (37)	37
Conservation areas	100.0% (42)	42
Children's play areas	100.0% (35)	35
Family picnic areas	100.0% (26)	26
Softball fields	100.0% (5)	5
Baseball fields	100.0% (10)	10
Basketball courts	100.0% (8)	8
Hiking and cross country skiing trails	100.0% (40)	40
Ice skating rink	100.0% (18)	18
Large park with many facilities	100.0% (35)	35
Local or neighborhood parks	100.0% (38)	38
Outdoor amphitheater or performance space	100.0% (20)	20
Public access to water bodies	100.0% (37)	37

Recreation center building	100.0% (22)	22
Soccer, lacrosse, football fields	100.0% (8)	8
Swimming pool	100.0% (22)	22
Tennis courts	100.0% (8)	8
Library	100.0% (44)	44
Other (please specify)		12
	answered question	95
	skipped question	11

8. How often do you visit the following recreation or open spaces in Holden?								
	I don't know about this place or facility	I know about it but never go there	1-5 times per year	6-10 times per year	Monthly	Weekly	Almost Daily	Response Count
Trout Brook Reservation	9.7% (9)	36.6% (34)	34.4% (32)	8.6% (8)	8.6% (8)	2.2% (2)	0.0% (0)	93
Eagle Lake Beach	15.1% (14)	54.8% (51)	24.7% (23)	3.2% (3)	1.1% (1)	0.0% (0)	1.1% (1)	93
Mason Park	65.2% (58)	19.1% (17)	11.2% (10)	1.1% (1)	1.1% (1)	2.2% (2)	0.0% (0)	89
The Town Forest	60.2% (53)	28.4% (25)	8.0% (7)	1.1% (1)	1.1% (1)	1.1% (1)	0.0% (0)	88
Jefferson Park	66.7% (60)	30.0% (27)	3.3% (3)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	90
Kimball Park	78.7% (70)	18.0% (16)	3.4% (3)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	89
Winthrop Oaks	85.4% (76)	14.6% (13)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	89
White Oak Land Conservation Society lands	51.1% (47)	33.7% (31)	8.7% (8)	3.3% (3)	3.3% (3)	0.0% (0)	0.0% (0)	92
Mass Audubon Eagle Lake Sanctuary	42.4% (39)	33.7% (31)	17.4% (16)	1.1% (1)	3.3% (3)	1.1% (1)	1.1% (1)	92
	10.6%	26.6%	29.8%	12.8%	11.7%			

