Medway Open Space and Recreation Plan (OSRP) Update Task Force January 18, 2018

Medway Town Hall, 155 Village Street, Medway MA 02053

MEETING MINUTES

Members Present: Matt Hayes, Chairman, Paul Mahoney, David Blackwell and Tina Wright

Members Absent: Glenn Trindade, Denise Legee, Paul Atwood and Rich Eustis

Staff Present:

- Susan Affleck-Childs , Planning & Economic Development Coordinator
- Bridget Graziano , Conservation Agent
- Anne Capra, OSRP Consultant
- Mackenzie Leahy, Administrative Assistant
- Tracy Rozak, Recording Secretary

Staff Absent: Dave D'Amico, Director of the Department of Public Services

Matt Hayes, the Task Force Chairman, called the meeting to order at 7:16 pm.

Susan reported that Tina Wright is here tonight on behalf of Denise Legee who was not able to attend the meeting. Susan reported that Cindy Sullivan is the new School Committee member of the Task Force. She will replace Rich Eustis who recently resigned from the School Committee.

1. Review Draft of Section 3 of OSRP- Community Setting – See Attached

Anne asked the task force for their comments and feedback on each of the sections. She stated she is working with Mackenzie on the maps now and some of the sections have placeholders in them where the maps will be inserted. Anne noted that the formatting is different in sections 3 and 4 and that is because they were working out of the 2010 OSRP and some of the information was carried over into the updated plan. She asked the task force if they would prefer footnotes at the end of each page or have them all at the end of the report. After a brief discussion, it was decided that the format of Medway's Urban Renewal Plan.

Paul asked if we can put hyperlinks in the new OSRP that will be posted on the Town's website. Matt stated this might not be right for this type of report as the links often break or people can change them.

Tina asked about the section regarding stormwater systems and the brownfields. She stated they are noted and asked if we are supposed to do anything about them. Anne stated section 7 will be an analysis of needs with action plans and such items will be identified there. In addition, most of the brownfield sites are on private properties and are listed with DEP. Susan asked if Anne was brought up to date by Dave D'Amico about the Town's water master plan.

Anne stated she that she was. Susan noted on page 13 under the Stormwater Systems paragraph, that the DPS has actually hired a MS4 compliance officer so the report should be updated to reflect that. Matt stated that sentence 2 under the same paragraph where it states "Among these efforts" the wording should be changed to "Medway has a stormwater task force that will evaluate the stormwater system." Matt also stated that whenever a percentage less than one are referred to, they should have a zero and a decimal point before it. Matt also stated that the Norfolk airport is closed and Anne stated she will remove that. Susan noted that Medway is now affiliated with GATRA- Greater Attleborough Transportation Authority which runs the rush hour shuttle service to the Norfolk commuter rail station. This should be added to page 9 under the Infrastructure paragraph. David stated that some of the tables are broken (carry over to multiple pages). Anne replied that this is a draft and all formatting and typos will be fixed before the final plan.

David asked why some of the sections are highlighted. Anne stated these include questions she has for the task force. Is this information in the highlighted areas still accurate? Are you still planning new wells? Bridget stated the reference should be to a redundant well and not a replacement well. Bridget will find out about the one in Medway and talk to Dave D'Amico about the other towns. Anne stated she received the Town's latest Water Integrity Report form Dave D'Amico. Bridget stated she will review it with Dave and they will offer comments. Susan stated that Medway worked with the 495 MetroWest Development Compact Plan which was adopted by the state to identify priority development and preservation areas. Susan thought this information should be added to the Regional Context section and will send this information to Anne. Matt stated that some of the commercial district names have changed and Susan will send that information to Anne as well. Anne mentioned they might want to include a zoning map in the regional section.

2. Review Draft of Section 4 of OSRP- Environmental Inventory and Analysis – See Attached

Matt stated there is no longer a public beach at Choate Park. Susan asked if we need a figure or a map on page 2 where it is highlighted. Anne stated she is working with Mackenzie on that and just highlighted that to remind her. Anne will reword all "figures" to say "Map".

Susan asked Bridget to check with Dave D'Amico about section 4 regarding Choate Park clean up and the dam renovation. Bridget will ask Dave and send the information to Anne. Also on page 6 under Ponds, it states two of the 3 tasks have been completed. What was the third task? Bridget will check with Dave D'Amico on that as well.

Matt asked about Page 5 under the section Chicken Brook. He asked if we have a drainage pump station. This info came from the 2010 mitigation plan. Bridget will ask Dave D'Amico about this. Cindy stated we now have a municipal sewer pump station at Trotter Drive. Susan asked Ann to capitalize the" t" in the word town when referring to the town of Medway.

Mackenzie would like to see something in the history of Medway section about the impact of the open spaces and agriculture and the way the land is used and ownership of some of the larger pieces of land in town. Ann stated she could add a narrative about specific parcels in this section. Tina mentioned Medway was once a big farming town. Tina could talk to Buzz Johnson and find out more information. Anne stated if they can point her to a resource that she will check it out. Susan mentioned there is a History of Medway book and she will review it and send any important information to Anne. Anne stated that if you use the names of property owners in the OSRP, it can open up a can of worms. Susan stated if there is a public record that documents the ownership then it is fine to put it in. Anne stated she will draft a history section and then the task force can censor it as they see fit.

Anne stated she spoke to Paul Atwood about the agricultural section but the Ag Commission does not have an inventory of all agricultural land. She does not see much info about this in the 2010 plan and thinks there should be more info about it. Bridget stated she can put some information together for her.

Anne stated that there is not much information in the Fisheries and Wildlife section on pages 14 and 15. Bridget stated she can put this information together and will send it to Anne. Anne stated they can include any information they have from other sources. Susan will talk to the animal control officer to see if she has any information about the number of farm animals. Bridget asked if they should include the proposed conservation restriction at the Salmon ARCPUD site which will include a boat launch to the Charles River. Anne stated yes and stated they might also want to include any maps of scenic roads.

3. Review Draft ADA Self Evaluation Report – See Attached

Anne stated you do not have to bring every facility up to ADA standards. The rules state if they do an ADA evaluation then they need to make recommendations but the Town doesn't have to implement them all. Anne stated if you're building a new facility, park or structure then you need to make it ADA compliant. Only some of the existing places need to be ADA accessible. Anne stated the task force must decide which areas they want to focus on. Anne suggested making at least one path to the water accessible or one playground accessible. This would include providing a handicap parking space, a handicap picnic table and a smooth surface accessing the area (not grassy/rocky/uneven) that does not pool up with water. Ann stated since they are already renovating Choate Park, that this might be a good place to make ADA accessible. The Amphitheater area was suggested as one the easier places to renovate as it is one of the flattest and easiest places to get to. Anne noted that some terrains are just not practical to renovate for ADA accessibility such as areas in a flood plain or if the alterations would fundamentally alter the function of the setting or endanger wildlife species. Bridget brought up trails that flood. A trail may meet the standard but if it floods it will be closed and would be inaccessible to everyone.

Anne asked who is in charge of/oversees the following areas:

- Charles River Amphitheater Conservation Commission
- Bresnahan's Landing Conservation Commission
- Oakland Park Parks Commission
- North Street Park and Playground- Parks Commission
- Dog Park Parks Commission. Ann states this area is not really appropriate for making ADA accessible as they have wood chips/ grass for dogs etc. Dave stated you could add a small cement path and landing. We would not have to do the whole park.
- Ohnemus Picnic Area Conservation Commission
- Village Street 1 Parks Commission
- Deerfield Street Pond –Conservation Commission. Anne didn't think this was a good choice to make ADA accessible due to the small size and would probably be hard to get funding for.

- Adams Street Meadow - Board of Selectman. Anne felt this was not a good choice to make ADA accessible. Tina stated they would like to have handicap parking spot and a path to the boardwalk with a turn round. Bridget said there is quite a slope from the parking area to the pond and that would require a resting spot along the way. Bridget thinks this might change the whole environment of the site.

- Medway Community Farm- Board of Selectman. Anne felt this was not a good choice to make ADA accessible but maybe they could make it accessible from the parking lot to the shed.

- Idylbrook Park- Conservation and Parks Commission
- Cassidy Field Parks Commission
- Choate Park Parks Commission

4. Develop Agenda for Community Forum #2, scheduled for Monday 3/12/18 at 7pm

Susan stated she will reserve Thayer House for the 2nd Community Forum. Anne stated they should open the forum with the survey results. They might also want to run through the overlay analysis and engage participants with questions. They could also ask the community to help identify farms. They would then present the goals and objectives and ask for comments and discussion.

5. Next Meeting- Monday 2/12 at 7pm - Develop Agenda

Anne stated she will have a draft of section 5 - an Inventory of lands with all the maps from Mackenzie and also a draft of section 7- Analysis of Needs. Anne will also put together a list of all land parcels that the task force can look at and prioritize. Tina stated they have a land inventory that she can send to Anne. Anne stated the task force should finalize the agenda for the March Community Forum.

Anne stated April 7th is reserved for the land management training and asked if this has been approved yet. Susan stated she has not brought this to the selectman yet. April 14th was the rain date for the training but Anne cannot keep this date. She can do April 28th. Bridget stated

that the Amphitheater would be a good spot for the land management training because it has such diversity- trails, meadows and access to Charles River etc. The Task force decided to select the site at the next meeting.

May 3rd is the date for another Task Force meeting. Anne will submit a final draft plan with the action plan. Susan stated the School Committee meets on the first and third Thursdays so that date is not good for new member Cindy Sullivan. Maybe Wednesday May 2nd or May 9th. Anne will check her calendar to see if those work... May 29th is the date for the 3rd community forum - she would like to have a final draft for the public. We should discuss how we want to present this. Tina stated it would be great to have a five page executive summary available to hand out at the May town meeting.

6. Review minutes of November 21, 2017 OSRP Task Force meeting

Paul Mahoney made a motion to approve the minutes from the November 21, 2017 meeting. Cindy Wright seconded. All were in favor 4-0-0. David Blackwell abstained.

7. Other Business as may come before the task force

None.

8. Adjourn

David Blackwell made a motion to adjourn the meeting at 9:35 pm. Paul Mahoney seconded. All were in favor. 5-0-0.

Respectfully submitted, Tracy Rozak, Recording Secretary

Reviewed and edited by, Susan E. Affleck-Childs Planning and Economic Development Coordinator

SECTION 3 COMMUNITY SETTING

A. Regional Context

Medway is located in Norfolk County in southeastern Massachusetts along the I-495 corridor, approximately thirty miles southwest of Boston. It is located within the Charles River watershed, with the Charles River forming the boundary between Medway and Franklin to the south. Two state highways traverse the town. Route 109 is a major east-west commuter route, linking Medway with Milford and I-495 to the west, and Millis, Medfield, Boston, and I95 to the east. Route 126 is a major north-south route, providing access to Bellingham and Woonsocket, RI to the south, and Holliston, Ashland, and Framingham to the north. Medway is served by the Franklin commuter rail line with three stations located in the abutting towns of Franklin and Norfolk.

As discussed in more detail below under Population Characteristics, Medway has the second highest median household income and second-lowest poverty rate among its abutting towns. Medway also has a slightly older population than the state as a whole.

Medway is a member of the Metropolitan Area Planning Council (MAPC), and its Southwest Area Planning (SWAP) sub-region. Medway is also a member of the 495/MetroWest Partnership. Through its participation in these organizations, Medway has participated in regional efforts addressing water resources, traffic problems, open space, economic development, town center development, and other issues.

Medway shares a major aquifer with the towns of Franklin and Norfolk near Populatic Pond. All three towns either have, or are planning, wells in the vicinity. The aquifer Zone II for the town of Bellingham's wells are in the southwest corner of town. The Town has adopted Groundwater Protection Overlay Districts to protect these shared water resources. Medway also shares a regional wastewater treatment plant with Franklin, Bellingham, and Millis. The plant is located in Medway and discharges into the Charles River. An expansion of the plant was completed in late 2016.

Medway participated in MAPC's production of "MetroFuture," the official regional plan for Greater Boston, which was adopted in 2008. This Open Space and Recreation Plan is consistent with that plan, especially in its acknowledgment of regional natural and recreational resources, and in its recommendation for communicating with neighboring towns to identify potential trails which could cross town borders.

The State Division of Conservation Services has a statewide open space and recreation plan called the Statewide Comprehensive Outdoor Recreation Plan (SCORP), which was last updated in 2017. Some of the findings of that plan for the region that includes Medway are discussed in Section 7, Analysis of Needs.

Among abutting towns, as of December 2017, Franklin, Holliston, and Norfolk have current Open Space and Recreation Plans. Bellingham, Millis, and Milford all have expired plans.

Required Map 1 – Regional Context

B. History of Medway

The area that became the Town of Medway was once home to the Mucksquit Indians of the Nipmuc tribe. Unlike some of the nomadic tribes, the Mucksquit were farmers, growing pumpkins, squash, corn and beans in addition to fishing in Medway's waterways.

The land containing what is now Medway was acquired by Medfield in 1659 through a "New Grant." In 1713, the Town of Medway was incorporated as a separate town, and began as a small farming community of 230 people.

Located along the Charles River and harnessing the Chicken Brook and Hopping Brook, Medway was the perfect location for mills of all kinds. Medway's bountiful water power provided the basis for large-scale industrial development beginning as early as 1809, when the Medway Cotton Manufacturing Company (the first of its kind in the country) was established on the Charles River. The first carpet mill in New England would be built on Chicken Brook in 1826. Medway would become nationally known for its Bell Foundry and Canning industry.

Hat factories, boot manufacturers, and other mills sprang up throughout the 1800s, and some remained in operation well into the twentieth-century. These were served by canals initially, and then a charter for a railroad was granted by the state legislature in 1847 and served all the towns in the area, extending as far as Blackstone. As the railroad developed, additional mills were attracted to the town. Population increased, roads were built, facilities such as schools and churches were established, and villages developed at what are now known as Medway Village and West Medway.

By 1900, Massachusetts's industry was concentrating in Lowell, Lawrence, and New Bedford. This contributed to the residential transformation of Medway, which, along with the additions of major highways in the vicinity, has resulted in Medway becoming a community that is predominantly residential.

Like many suburban towns, Medway experienced significant growth following the end of World War II. This growth began to accelerate during the 1960s, following the construction of I-495, when the growth rate exceeded that of the State's as a whole, and the population reached 7,938. During this time, a new suburban-style strip commercial center developed along Main Street (Route 109). As indicated in Table 1, growth slowed somewhat during the 1970s (+5.8%) before accelerating again during the 1980s (+17.6%) and 1990s (+25.3%). Growth slowed significantly during the 2000s (+2.4%), but is estimated to have picked up again between 2010 and 2016 (+4.4%).

During the 1990s, the Town began a series of infrastructure improvements to attract industry to the Medway Business Park at I495 and Route 109. The park currently hosts a bowling ball manufacturer, a supplier and designer of outdoor playground equipment and landscape elements, and several other businesses.



C. Population Characteristics

This section discusses Medway's change in population characteristics over time, as well as in comparison to Norfolk County, and Massachusetts. Specific indicators include population growth, age distribution, school enrollment, density, income, ethnicity, and labor force.

Population Growth

Population growth in Medway slowed somewhat during the 1970s before accelerating again during the 1980s and 1990s. Growth slowed significantly during the 2000s, but is estimated to have picked up again between 2010 and 2016.

Table 1 Population Growth of Medway, 1970-2018						
Population	Absolute Change	Percentage Change				
7,938	N/A	N/A				
8,447	464	+5.8%				
9,931	1,484	+17.6%				
12,448	2,517	+25.3%				
12,752	304	+2.4%				
13,308	556	+4.4%				
	Population 7,938 8,447 9,931 12,448 12,752	Population Absolute Change 7,938 N/A 8,447 464 9,931 1,484 12,448 2,517 12,752 304				

Source: U.S. Census Bureau, American Fact Finder https://factfinder.census.gov Notes: 1970, 1980, 1990, 2000, and 2010 from U.S. Census, 2016 Estimate from American Community Survey

This most recent growth trend is in line with that of Norfolk County and Massachusetts, as depicted in Figure 1.

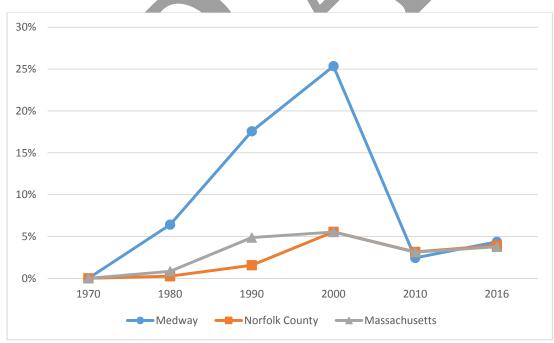


Figure 1 Population Growth Comparison, 1970-2016

Source: U.S. Census Bureau, American Fact Finder https://factfinder.census.gov Notes: 1970, 1980, 1990, 2000, and 2010 from U.S. Census; 2016 Estimate from American Community Survey

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Age Distribution

In 2015, the largest age group in Medway was between 45 and 64 years (34.4%), followed by 19 years or younger (27.7%), then 20-44 years (26.1%), and over 65 years (11.7%). Figure 2 indicates that in 2015, Medway had a higher percentage of its population under the age of 19 years than the county and state, 27.7% vs. 24.5% (county) and 24.0% (state). Medway had a lower percentage of its population between the ages of 20 and 44 years than the county and state, 26.1% vs. 31.2% and 33.6%. To contrast, Medway had a higher percentage of its population between the ages of 45 and 64 years than the county and state, 34.4% vs. 29% and 27.9%. At the other end of the scale, Medway has a lower percentage of its population age 65 years and older than the county and state, 11.7% vs. 15.3% and 14.6% in 2015.

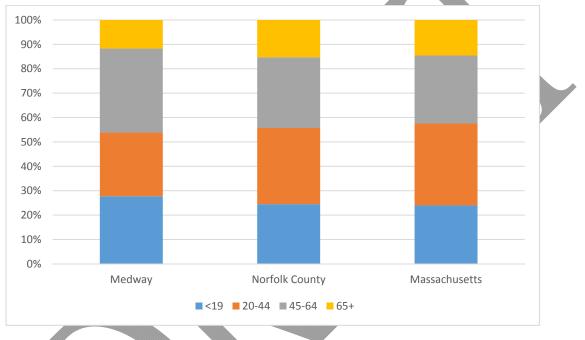


Figure 2 Age Distribution Comparison, 2015

Source: U.S. Census Bureau, American Fact Finder https://factfinder.census.gov Notes: 2015 Estimates from American Community Survey

School Enrollment

As shown in Table 2, student enrollment in the Medway School District has been in decline since 2002. From 2002 to 2012, the student enrollment dropped by 366, or 12.9% of its population. In the following five years, the district lost an additional 166 students (6.7%). Almost one-third of the population of Medway (27.7%) is under 19 years old.

Table 2 Medway's School District Enrollment, 2002-2017

School Year	Population	Absolute Change	Percentage Change
2002-2003	2,848	N/A	N/A
2012-2013	2,482	366	-12.9%
2016-2017	2,316	166	-6.7%

Source: MA Department of Elementary and Secondary Education, http://www.doe.mass.edu/

Density

The average density in Medway nearly doubled from 684 persons per square mile in 1970 to an estimated 1,153 per square mile in 2016. Medway's average density has consistently been lower than the county-wide average density. Since 1990, Medway's average density has been higher than the average statewide density.

Year	Medway	Norfolk County	Massachusett	ts		
1970	684	1,527		726		
1980	728	1,531		732		
1990	856	1,555		767		
2000	1,073	1,642		810		
2010	1,105	1,694		839		
2016	1,153	1,760		873		
Source: U.S. Consus Burg	ourge: U.S. Consus Burgey, American East Einder https://factfinder.consus.gov					

Table 3 Density (Persons per Square Mile), 1970-2016

Source: U.S. Census Bureau, American Fact Finder https://factfinder.census.gov Notes: 1970, 1980, 1990, 2000, and 2010 from U.S. Census; 2016 Estimate from American Community Survey

It is important to note that average density is not necessarily an indicator of either the existence or quality of open space. Two towns with the same average density can have vastly different development patterns. One town could be developed into concentrated centers or villages surrounded by vast areas of open space, while the other could be characterized by low-density sprawl spread throughout its land area. This concept is further illustrated by the reduction in the population of Boston from 1950 to 2000 while the suburbs grew substantially. The City of Boston reached its highest population in 1950 at 801,444. This population was accommodated on about 46 square miles (about 4 times greater than the land area of Medway). In 2010, Boston's population was 23% less at 617,594. If the 183,850 people who left Boston were resettled in the suburbs at a density of 1,100 per square mile (almost equal to the 2010 density of Medway), it would take 167 square miles, an area about fourteen times larger than Medway, to accommodate them. Clearly, concentrating development in city, town and village centers is a key component of protecting and preserving open space.

Income

Medway's median household income in 2015 was \$110,241. This is well above the county (\$88,262) and state (\$68,563) figures.

Geography	Per Capita Income Estimate	Median Household Income Estimate	Percent of Individuals Below Poverty Level*
Medway	\$47,240	\$110,241	3.1%
Norfolk County	\$45,829	\$88,262	6.1%
Massachusetts	\$36,895	\$68,563	10.4%

Table 4 Income and Poverty, 2015

* For whom poverty status was determined.

Source: American Community Survey 2010-2015 Five Year Estimates. Five-year estimate of income for the past 12 months and reported in 2015 dollars.

In comparing median household income in 2015 for Medway to its abutting towns, Medway has the second highest median household income (\$110,241) to Norfolk (\$141,278). The figures for Holliston (\$108,869), Franklin (\$108,272), Millis (\$92,042), Bellingham (\$88,460), and Milford (\$69,741) are lower. The number of families in Medway below the poverty level in 2015 was 3.1%. This is the second lowest level among the abutting towns which range from 3.0 % (Bellingham) to 11.2% (Milford). It is significantly lower than the Norfolk County (6.1%) and Massachusetts (10.4%) levels.

Ethnicity

The 2010 U.S. Census indicated that Medway's population was 95.0% white. Other races included Blacks or African-Americans (1.0%); American Indian and Alaska Native (0.2%); Asian (2.2%); Two or more races (1.3%); and Other (0.5%). Latinos of any race constituted 2.0%.

	2000		2010		2015		Since 2000
	#	%	#	%	#	%	%
Total Population	12,448	100	12,752	100	13,069	100	+5.0
Male	6,032	48.5	6,205	48.7	6,199	47.4	+2.8
Female	6,416	51.5	6,547	51.3	6,870	52.6	+7.1
Race							
White	12,139	97.5	12,109	95.0	12,195	93.3	+0.5
Black or African American	71	0.6	131	1.0	227	1.7	+219.7
American Indian & Alaska Native	12	0.1	30	0.2	0	0	-100.0
Asian	120	1.0	280	2.2	408	3.1	+240.0
Hispanic or Latino	105	0.8	250	2.0	328	2.5	+212.4

Table 5 Medway Demographic Profile

Source: U.S. Census Bureau, American Fact Finder https://factfinder.census.gov Notes: 2000 and 2010 from U.S. Census; 2015 from American Community Survey

Labor Force

In 2016, Medway had a labor force of 7,229 with 7,019 residents employed and 210 unemployed. Medway experienced a 2.9% rate of unemployment, lower than both Norfolk County's overall rate of 3.2% and Massachusetts's rate of 3.7%.

Table 6 Labor Force and Unemployment Data, 2016

Geography	Labor Force	Employed Persons	Unemployed Persons	Unemployment Rate
Medway	7,229	7,019	210	2.9%
Norfolk County	370,658	358,675	11,983	3.2%

Massachusetts	3,583,500	3,473,400	110,100	3.7%		
Source: MA Executive Office of Labor and Workforce Development. http://lmi2.detma.org/lmi/lmi_lur_a.asp						

D. Growth and Development Patterns

Patterns and Trends

As discussed above, Medway began as an agrarian community. Its water power led to the development of mills during the Industrial Revolution. People settled into villages at Medway Village and West Medway. Much of the remainder of town was agricultural.

In 1971, the "developed" land in Medway (including recreation, residential, commercial, industrial, mining, urban open land, transportation, and waste disposal) totaled 1,732 acres or 23.2% of the total land area in Medway. The "undeveloped" area (including crop land, pasture, forestland, wetland, open land, water and woody perennial) totaled 5,682 acres, or 76.1% of the total. By 1985, the developed land had increased to 2,445 acres, a change of 712 acres. By 1999, the developed land increased further to 3,381 acres – more than 45% of the Town's land area. Thus, developed land almost doubled (an increase of 95%) from 1971 to 1999 while population increased by only 63% (from 7,938 to 12,448) during roughly the same time (1970 to 2000).

Acreage devoted to commercial and industrial uses only increased by 98 acres during this period. Residential land area, however, increased by 1,518 acres, accounting for 92% of the increased developed land. Almost two-thirds of this increase in residential land (986 of the 1,518 acres) was in the category of low density residential (lots larger than 1/2 acre).

Thus, the 1970 population of 7,938 occupied a total of 1,478 acres in 1971, or about .19 acres per person. The 2000 population of 12,448 occupied 2,996 acres in 1999. This is .24 acres per person. Another way of looking at it is Medway was able to accommodate 7,938 people in 1971 on 1,478 residential acres. In order to add 4,510 people by 2000, it required an additional 1,518 acres of residential land! This is .34 acres per person, almost twice the amount of land per person used in 1971.

The biggest loss of undeveloped land was in the category of forestland, which decreased by 1,040 acres between 1971 and 1999. Pasture land was almost completely eliminated during this period (from 246 acres to 30) and crop land was reduced by 298 acres.

Table 7 details the number of single-family new house construction building permits issued in Medway from 1997 to 2014. While the number of permits issued annually dipped below 10 from 2008 to 2012, 2013 and 2014 saw a surge of 34 and 26, respectively.

Year	# Buildings	Average Cost
1997	78	\$144,100
1998	53	\$170,200
1999	63	\$178,200
2000	57	\$230,400
2001	65	\$198,200
2002	38	\$198,400
2003	22	\$202,500
2004	22	\$257,400
2005	30	\$289,200
2006	11	\$281,000
2007	11	\$336,200
2008	8	\$326,600
2009	6	\$342,200
2010	9	\$338,700
2011	6	\$326,900
2012	5	\$399,000
2013	34	\$211,600
2014	26	\$213,100

Table 7 Single-family New House Construction Building Permits

Source: http://www.city-data.com/city/Medway-Massachusetts.html

Infrastructure

The significant infrastructure elements in Medway are its transportation network, water service, sewer service and stormwater system. Each of these is discussed briefly below.

Transportation

Medway is home to between 80 and 90 miles of public roads including access to two major roadways, Route 109 and Route 126. Route 109 runs east-west through the center of town and divides Medway in half. With Route 128 and I495 at either end of it, Route 109 becomes a very convenient way to reach many destinations. Route 126 is a north-south roadway, and is heavily trafficked for its access to Bellingham, Holliston, and I495. These thoroughfares are supported by smaller roads such as Village Street, which is parallel to Route 109 until it joins Route 109 in Millis. It also provides convenient access into Bellingham and I495. There are also several private roads and unaccepted streets.

Commuter rail service to Back Bay Station and South Station is available in neighboring Franklin. Shuttle service from several locations in Medway to the Norfolk rail station was initiated in 2008 and has been very successful. Medway is not affiliated with a regional transit authority. Brush Hill Transportation provides rush hour service to Boston from West Medway M-F. The Norfolk Airport, a General Aviation (GA) facility, is easily accessible. It has a 2,700' asphalt runway with a copter approach. Sidewalks are an important element of any town's transportation network. Although sidewalks exist on many roads throughout Medway, residents report that they are not in good condition, and often do not provide critical connections for safe pedestrian routes to popular destinations. The Department of Public Services completed the Six Year Road and Sidewalk Plan 2019-2024, with scheduled improvements and costs noted in the table below.

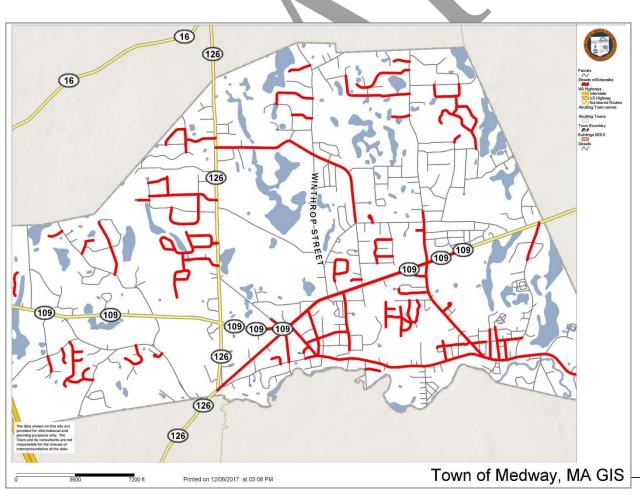
STREET NAME	SIDEWALK COST				
YEAR 1 - 2019					
High Street	\$124,537				
Wellington Street	\$135,392				
Franklin Street	\$115,645				
Center Street	\$53,720				
Lincoln Street	\$146,206				
Awl Street	\$26,459				
North Street	\$143,086				
Church Street	\$12,920				
Barber Street	\$101,945				
Main Street (Village Street to Bellingham Line)	\$50,000				
YEAR 1 TOTAL	\$909,910				
YEAR 2 - 2020					
Holbrook Street	\$110,665				
Laurelwood Lane	\$151,691				
Main Street (Highland Street to Summer Street)	\$300,000				
Daffodil Lane (one side only)	\$46,920				
Stall Brook Road	\$85,302				
Stoney Ridge Road	\$27,880				
YEAR 2 TOTAL	\$722,448				
YEAR 3 - 2021					
Alexandria Drive	\$67,874				
Birch Bark Road	\$70,417				
Maple Leaf Lane	\$47,000				
Sun Valley Drive	\$135,000				
Woodland Road	\$62,538				
YEAR 3 TOTAL	\$382,829				
YEAR 4 - 2022	2				
Cynthia Circle	\$32,721				
Broad Street	\$106,222				
Village Street (Legion Street to Millis Street)	\$739,000				
YEAR 4 TOTAL	\$877,942				
YEAR 5 - 2023	;				

Table 8 Six Year Sidewalk Plan

Open Space and Recreation Plan Draft – December 28, 2017

Dogwood Lane	\$252,862
Wildwood Road	\$60,643
Azalea Drive	\$178,219
Stanley Road	\$213,700
Mallard Drive	\$35,216
Spring Street	\$53,279
Autumn Road	\$157,158
Quail Drive	\$54,785
Milford Street (Summer Street to Highland Street)	\$451,200
YEAR 5 TOTAL	\$1,457,061
YEAR 6 - 2024	
Oakland Street (Main Street to Senior Center)	\$200,000
Main Street (Richard Street to Lee Street)	\$350,000
Village Street (Cottage Street to High Street)	\$67,000
YEAR 6 TOTAL	\$617,000
	2011/000

Figure 3 Roads with Sidewalks



Open Space and Recreation Plan Draft – December 28, 2017

Water Supply

The Town of Medway's water supply (Medway Water Division) is sourced through four groundwater wells, all of which are part of the Charles River Basin. Approximately ³/₄ of the Town is serviced by the public water supply, and ¹/₄ is on private wells. The Medway water distribution system consists of four (4) groundwater supply sites, two (2) water storage facilities and approximately 75 miles of water mains, and serves approximately 13,000 residents. The four wells combined produce an average of 300 million gallons of water each year.¹ Well #1 or Populatic Street well is a gravel-packed well located off Populatic Street. Well #2 or Oakland Street well is a 24-inch well, located off of Oakland Street, and Well #3 or Village Street well is an 8-inch diameter well located off Village Street. Well #4 is at Industrial Park. Medway currently exceeds the authorized withdrawal volumes for its wells, and is under order by MassDEP to issue a mandatory water ban annually.

The wells are located in two separate Zone IIs (see Water Resources Map). The Zone II for Well #1 and 3 extends into Franklin, and the Zone II for Well #2 extends into Millis. Each well has a Zone I of 400 feet. The wells are located in an aquifer with a high vulnerability to contamination due to the absence of hydrogeologic barriers (i.e. clay) that can prevent contaminant migration. All three wells have lime and polyphosphate added for corrosion control. Fluoride is also added for dental health. Water is stored in two storage tanks located on Lovering Street and Highland Street, with a combined capacity of 2.8 million gallons.² There is a Groundwater Protection Overlay Zoning District that regulates potentially harmful land uses within the Zone II.

The Town of Medway is currently addressing the near and long-term integrity of the municipal water supply. The primary focus of the community is the reduced water quality due to elevated iron and manganese levels entering the system from selected sources. The rate and frequency of withdrawal from the sources is managed to the extent practicable to reduce the iron and manganese entering the system. Medway's water service area includes mainly residential demand, which makes up approximately ninety percent (90%) of the system water use, according to the town's Annual Statistical report submitted to MassDEP. The remaining demand is commercial and industrial. According to a recent Water Integrity Report³, the water pumping records for 2015 and 2016 indicates that the Town of Medway water supply capacity (0.947 to 1.140 mgd), may be exceeded by system water use prior to 2023 (WRC-OWR projection). Leak detection and repair is a priority. Additionally, Medway should pursue water supply improvement options that will increase water supply capacity. Recommended options to be investigated included:

- Install iron and manganese removal plant to treat Oakland water supply to allow longer run times and greater volume per day.
- Populatic replacement well to return capacity back to 600 gpm.

¹ Medway Consumer Confidence Report, 2016.

² Medway Source Water Assessment and Protection Report, 2002.

³ Draft Medway Water Integrity Report, Haley and Ward, Inc., October 16, 2017.

- Install satellite wells at Oakland to extend time between well cleanings resulting in greater volume per day.
- Locate new water supply; one location with potential as a water supply is Chicken Brook.

Wastewater System

The wastewater system is comprised of approximately forty-four miles of gravity sewer that discharges into the treatment facility operated by the Charles River Pollution Control District, and services 3/4 of the community. Through its recent sewer extension project, the Department of Public Services now operates and maintains a sewer pump station located in the Trotter Drive Industrial Park area. The Department of Public Services continues to make improvements for major sewer trunk line repairs with several inflow and infiltration problems corrected, and will continue. Options for recharging the aquifer with treated wastewater rather than discharge to the Charles River are being explored as part of design solutions to address the water shortages described above.

Stormwater System

Medway is a NPDES Municipal Separate Storm Sewer System (MS4) regulated community. As such, they have been implementing the draft 2010 NPDES Phase II permit, despite the continued delay in issuance of a Final Permit by the EPA. Among these efforts are an intense public outreach program to lay the groundwork for creation of a stormwater utility. A Stormwater Task Force has been convened, consisting of representatives from the Board of Selectmen, Department of Public Services, Water and Sewer Commission, Charles River Pollution Control District, Planning and Economic Development Board, Conservation Commission, and Finance Committee, to discuss strategies related to the new MS4 permit and other water related issues. With funding provided by a grant from MassDEP, the town has developed a draft Stormwater Utility Implementation Plan. Work also continues on stormwater infrastructure identification, mapping and testing. Out of the 221 outfalls in Medway, 75 have been located with GPS and inspected for dry weather flows. Some illicit connections have been detected, most related to basement sump pump connections. DPS is also seeking the creation of an MS4 Compliance Officer, a new position that would oversee implementation of the MS4 permit.

Long-Term Development Patterns

The current Zoning Bylaws provide for three residential districts: two agricultural-residential, and one village residential. Zone AR-I requires minimum lot sizes of 44,000 ft2 and 180 ft. of continuous frontage. Zones AR-II and VR require minimum lot sizes of 22,500 ft2 and 150 ft. of frontage. There are four designated commercial districts and three industrial districts. A major increase in development has occurred since 1991. Most of Medway's development is in the form of residential subdivisions.

The buildout analysis completed in 2000 by the MAPC projected that there are an additional 2,617 developable acres in Medway. This translates into 2,057 additional residential units, 5,658 additional residents (for a total buildout population of 18,106), more than 4.1 million square feet of commercial and industrial space, about 1,234 additional school children (for a buildout total of 3,829), an additional demand for water of 735,033 gallons per day (for a buildout total of 1.9

million gallons per day), and an additional 39 miles of roadway.

By agreement with the Massachusetts Secretary of the Commonwealth, the UMass Donahue Institute (UMDI) has produced population projections for all Massachusetts municipalities at 5year intervals to 2035, using a model developed by Dr. Henry Renski, Associate Professor of Regional Planning at UMass Amherst. For Medway, these projections are lower than previous forecasts by MAPC and the Massachusetts Institute for Social and Economic Research (MISER) for 2020: 14,491 (MAPC) and 15,080 (MISER)⁴. The 2000 Buildout Analysis provides an even greater estimated population based on 10% annual growth rate, forecasting the Town's buildout capacity at 18,106 people around 2040. The Buildout Analysis forecast is inconsistent with the recent projections from UMDI, and unlikely given the only 2.4% increase between 2000 to 2010, and 4.4% from 2010 to 2016.

Table 8 Population Projections 2015-2035

	PROJECTIONS				
Census 2010	2015 2020 2025 2030 2035				
12,752	13,153	13,146	13,312	13,502	13,526

Source: http://pep.donahue-institute.org/

⁴ Medway Open Space and Recreation Plan, 2010.

SECTION 4 ENVIRONMENTAL INVENTORY AND ANALYSIS

A. Geology, Soils & Topography

Medway's geology is largely a result of glacial activity that occurred about 20,000 years ago. The terrain ranges in elevation from 135 to 370 feet above mean sea level (OSRP 2010).

Most soils in Medway are fine sandy loams (Canton, Merrimack, Paxton, Ridgebury, Scituate, Woodbridge). These soils are nearly level to steep and very deep. They are well-drained and located on glaciated uplands. Erosion on slopes can be a hazard, but fine sandy loams are well-suited for agriculture, forests, and meadows. They are also suited well for building foundations, making these soil types desirable for development, though slopes can limit their use (OSRP 2010).

Pockets of sandy loam (Hinckley), loamy sand (Deerfield), and silt loam (Rippowam, Raynham) also run through the town. Hinckley is well-suited for crops, lawns, and pasture and is sometimes found to be wooded. Because of the high permeability of Hinckley soils, there is a danger of septic tank effluent polluting groundwater (OSRP 2010). Very fine sandy loam and mucky sandy loam (Scarboro, Birdsall) form the substrate for wetland areas in town and support the important wetland ecosystem services of flood protection and the replenishment and filtration of drinking water resources (Conley & Serrill).

INSERT SOILS AND GEOLOGY MAP

B. Landscape Character

Medway offers a diverse landscape that includes urban, suburban, small town, rural, and agricultural character. The town includes hills, forests, fields, stone walls, ponds, rivers, streams, marshes, and swamps. These elements provide a pleasant and productive environment in which to live and work (OSRP 2010).

With its location along Route 109, and containing Choate Pond and the Charles River, Medway blends old and new into its existing rural character. By incorporating a public beach, playground and nature trails, Medway maintains its undeveloped feeling; a characteristic that could be lost in the future due to increasing traffic and loss of wildlife habitats (OSRP 2010).

The corridor between Summer and Winthrop Streets, through which Chicken Brook runs, retains much of the town's historic, rural character. The historic New England pattern of settlements clustered amid fields and forest remains in areas of Medway. Historic clusters in Medway Village and West Medway, an emerging modern village at the intersection of Routes 109 and 126, and Village Street, which runs across the southern end of town from Bellingham to Millis, all showcase historic homes and represent a significant part of Medway's character (OSRP 2010).

Route 109, also known as Main Street, runs through the middle of Medway in an east-west direction and makes up the commercial core of the town. It is also the site of many historic homes. The commercial area is largely suburban in character, having been developed primarily from the 1960s to the present (OSRP 2010).

C. Water Resources

Surface waters compose about 0.5 percent of Medway's area (OSRP 2010). A network of wetlands and streams weave through town on their way to the Charles River which forms Medway's border with the town of Franklin, a stretch that makes up 2/3 of Medway's entire southern border. Medway lies entirely within the Charles River watershed. INSERT WATER RESOURCES MAP

Drinking Water

The public water supply system is also discussed under infrastructure in Section 3.

Aquifer Recharge Areas

Drinking water for Medway's residents and businesses originates from four local groundwater supply wells installed in sand and gravel deposits. These wells tap the medium and high yield aquifer of the Charles River basin underlying the eastern and southeastern part of town. The Charles River basin is fed by the Bugastow sub basin and the Chicken Brook-Charles River sub basin. The most productive aquifer is connected with the Charles River in the southeastern corner of town near the borders with Franklin and Norfolk (Conley & Serrill). Figure _____ illustrates the sub basins, Town wells, aquifers and Zone II water supply protection areas.

Regulatory Requirements

The Commonwealth of Massachusetts started the Sustainable Water Management Initiative in 2010 to guide MA DEP's permitting of water withdrawals under the Water Management Act (WMA) with the goal of providing water for communities while also supporting ecological health and promoting economic development (Massachusetts Sustainable Water Management Initiative). WMA regulates the sub basins and requires the town to minimize impacts to river and stream base flow by limiting water withdrawals to a "safe yield," the maximum dependable water withdrawal calculated over a series of years. WMA makes conservation and water loss reduction important priorities (Conley & Serrill).

Since 2003, Medway has been designated as "urbanized" and is regulated by the EPA's NPDES (National Pollution Discharge System) permits program as an MS4 (Municipal Separate Storm Sewer System). An MS4 is a system composed of stormwater drains, pipes, culverts, swales and ditches designed to collect and transfer stormwater from developed areas to the nearest water bodies. An MS4 is not a combined sewer system.

Medway has a Stormwater Management Plan to achieve regulatory compliance and by doing so manage stormwater safely and safeguard ecological health by reducing pollution to waters. The town reports its stormwater activities in a yearly report. The 2016-2017 report describes

revisions and improvements that are being incorporated into the stormwater collection system along Route 109 and Choate Pond as part of the Route 109 renovations project. It also lists work completed under the categories of: public education, outreach, and participation; illicit discharge detection and elimination; construction site stormwater runoff control; post-construction stormwater management in new development/redevelopment; and pollution prevention in municipal operations. The Town is currently strategizing how to meet the requirements of the new MS4 permit which will go into effect July 1, 2018 (NIPDES Phase II Small MS4 General Permit Annual Report).

Water Supply and Demand

Medway's water system has limitations when it comes to meeting the water demands of the town. The Town has enough permitted capacity to meet demand needs, but its current four wells cannot pump enough water to meet future projected water demands (Water Supply & Demand Assessment in Relation to Exelon Power 'West Medway II' Project for Town of Medway, MA). Medway is strategizing how to best improve the water system to increase the quantity of water the system can pull. Water testing in 2016 showed that water quality at all wells was in compliance, with the exception of excessive manganese levels at the Village Street well. During 2016 the Medway Water Division conducted one Level 1 Assessment and was required to complete one Corrective Action (Annual Water Quality Report).

Water Conservation and Protection

Because the drinking water aquifers are shallow and connected, development and other activities, such as agriculture, can affect drinking water quality and quantity downstream. The town wells can benefit from good management practices including identifying and protecting land that directly effects aquifers and groundwater (Conley & Serrill).

The town encourages water conservation through education and outreach efforts. To sustain local water resources a water ban was in effect from May 1, 2017 to September 30, 2017. No outside watering was allowed from 9-5, sprinkler systems were forbidden, and restrictions for watering via a hose were put into place (Water Ban Notice).

Flood Hazard Areas

Many of the water resources in Medway are within flood hazard areas. (See Water Resources Map) Three major types of flood hazard zones exist in Medway: A, AE and X500. Zone A is an area inundated by 100-year flooding for which no Base Flood Elevations have been determined. There are three small areas of Zone A in Medway as follows: (1) a small area between Village Street and Forest Road, along the abandoned railroad bed; (2) the northern part of Hopping Brook; and the area along the small brook near the intersection of Route 109 and Holliston Street (OSRP 2010).

Zone AE is an area inundated by 100-year flooding for which Base Flood Elevations have been determined. This zone closely follows most of Hopping Brook, Chicken Brook, the Charles River, and the small brook near the intersection of Route 109 and Holliston Street (OSRP 2010).

Zone X500 is an area subject to inundation by a 500-year storm; an area inundated by 100-year flooding with average depths of less than one foot or with drainage areas less than one square mile; or an area protected by levees from 100-year flooding. It is the most common zone in Medway. X500 zones abut the AE zones along Hopping Brook, Chicken Brook, the Charles River and the small brook near the Route 109 and Holliston Street intersection. Additionally, there are several patches of wetlands in town that are within Zone X500, including a patch west of Clark Street, two patches near Stall Brook at the Milford and Bellingham borders, the area around Summer Hill Road, the wetlands at the end of the brook near the Highland and Park Streets intersection, four patches of wetlands in the Black Swamp, a patch of wetlands on Route 126 near Pheasant Run Road and two patches of wetlands along the brook that offshoots eastwardly from Milk Pond. There is another X500 zone lining the brook that offshoots northward from Hopping Brook around Route 109. Finally, an X500 zone surrounds the AE zone around both Park Pond and Milk Pond (OSRP 2010).

Medway is currently updating the 2011 Local Multi-Hazard Mitigation Plan, which expired in April 2016. The Town has received a FEMA Pre-disaster Mitigation Grant to update the plan. Flooding is the most relevant and serious natural hazard identified by local officials. There are eight critical infrastructure sites within FEMA floodplains and five within locally identified flood areas, including: Walker Street Bridge, Milford Street Culvert, Main Street Culvert, and the Town's Populatic Well. With the assistance of a Hazard Mitigation Grant, the Town has been working on drainage improvements to the Brentwood Subdivision (built in the 1970s), an area identified in the recently expired plan which is prone to flooding.

Locally Identified Areas of Flooding (Hazard Mitigation Plan)

Brentwood

Brentwood, a subdivision built in the 1970's, suffers from inadequate drainage systems. Water runoff from a hill located west of the community is the primary cause of the flooding. Additionally, development, which has increased impervious surface around the subdivision has decreased the ability for stormwater to absorb into the ground and has increased the rate of water flow. Rain water from the abutting hill coupled with increases in impervious has caused the culvert at Route 109 to exceed its capacity, further exacerbating Brentwood flooding. Damages sustained from the flooding include street closures, property damage and basement flooding to several single-family houses. These damages typically result in minor damages, but occur frequently. The town is currently conducting a drainage study and plans to implement the recommendations of the study. Mitigating this problem is a high priority for Medway.

Hopping Brook

Each spring Hopping Brook exceeds its banks. Infrequently, the brook floods Route 109, a major roadway and escape route for Medway residents. Every spring and in larger rain storms, 4-5 five houses south of the brook sustain flood damages. Expanding the culvert under Route 109 could potentially mitigate this problem.

Chicken Brook at Village Street

During large rain storms and spring events, Chicken Brook exceeds its banks floods Village Street. The town also indicated that flooding occurs south of Chicken Brook in Bellingham causing the upstream portion in Medway to flood. The town has a pump station that runs year round, but exceeds capacity every spring and in large rain storms. While this is a frequent problem, there is little damage caused by the flooding. The town has identified a hydro analytics study of the area and/or building a retaining wall on the northern banks of Chicken Brook as potential mitigation measures.

Main Street by the Mill

During large storms water levels at Chicken Brook raise and threaten to flood the old Medway Mill. The brook flows directly under the mill, a site for potential development. In attempts to restore the natural flow of Chicken Brook, the town is looking to conduct stream restoration.

Charles River at Village Street

The Charles River rises every spring and causes or threatens flooding throughout its duration. The Charles River flows through the southern portion of Medway, which has low topography. During large storms, Village Street, a major roadway through Medway, sustains flooding resulting in partial to complete road closure. The town is currently working to mitigate flooding at this location.

Choate Dam

The Choate Dam was renovated in ______. If the dam were to break it would cause extensive to catastrophic southward/downstream damages.

Sanford Dam

The town is unsure of the condition of the Sanford Dam. It is a minor concern for the town. However, if the dam were to break it would cause extensive to catastrophic eastward/downstream damages.

Rivers

The Charles River is the most significant water body in town. It is a winding eighty-mile river that flows from Hopkinton to Boston Harbor. The watershed, which includes thirty-five communities, covers a drainage area of 308 square miles. During the Industrial Revolution, the Charles River was widely used as a power source for manufacturing mills, including in Medway. Pollutants discharged from these mills led to significant environmental damage to the river. The Charles River Watershed Association (CRWA) was formed in 1965 in response to the conditions of the river. Ongoing efforts to clean the Charles River have resulted in ninety percent of it being currently swimmable, according to CRWA (OSRP 2010).

The town's brooks and streams are all tributaries of the Charles River and thus contribute to its water quality, streamflow, and temperature. The major tributaries are Chicken Brook, Hopping Brook, and Stall Brook. Chicken Brook flows north to south through the central part of town in a

corridor with many opportunities for recreation known as the Chicken Brook Ecological Corridor. This area includes wildlife habitat, agricultural fields, hiking trails, and Choate Park. Chicken Brook often dries up the in summer. Hopping Brook originates in Holliston and meanders through Medway from its northwest corner to join the Charles River where it begins to form the border between Medway and Franklin. Hopping Brook is protected, in part, by US Army Corps of Engineers land. Stall Brook runs through the southwestern corner of town (Master Plan 2009).

The Bellingham Dam Removal Project was completed between November 2016 and February 2017. The goal of this project was to remove the impoundment and sediments to free flow conditions on the Charles River and improve water quality and the health of the aquatic ecosystem (Bellingham Dam Removal FAQ Sheet).

Ponds

Choate Pond, along with Milk Pond, is fed by Chicken Brook and, in turn, feeds the Charles River. Choate Pond is the largest body of water in town. The pond is often closed due to high bacteria counts, so it is not accessible for fishing and swimming. The 2004 Annual Town Meeting approved funding to clean up Choate Pond. Two of the three proposed tasks have been completed (OSRP 2010). STATUS??

Wetlands

Wetlands are scattered throughout the town, with heavier concentrations along the major waterways. Most of the wetlands are deciduous forested wetlands, predominantly red maple swamps. There was no net loss of wetlands in Medway in the period from 1971 to 1999. The Black Swamp, which straddles the town line between Medway and Millis, is the most prominent wetland in Medway with great wildlife habitat and little human access (2010 OSRP).

During the 1970s, the U.S. Army Corps of Engineers (USACE) acquired hundreds of acres of wetlands and low-lying property along the course of the Charles River and its tributaries for flood control purposes. This assemblage of lands is known in its entirety as the Charles River Natural Valley Storage Area. It is a flood control project initiated as a "passive" means of protecting the environment and reducing downstream flooding by ensuring that existing low-lying areas in the flood plain were not altered in any way that would reduce their capacity to contain, slow, or absorb flooding. The Charles River Natural Valley Storage lands are located in Millis, Medfield, Norfolk, Franklin, Holliston, Needham, Sherborn, Bellingham, Dedham, Dover, Medway, Newton, Wrentham, Walpole, Natick, and Boston. In several instances, these lands have been managed and further developed for conservation and recreation purposes. (The Charles River Meadowlands Plan for Bellingham, Franklin, and Medway).

Vernal Pools

There are seventeen certified vernal pools and sixty-seven potential vernal pools in Medway. MA Fish and Wildlife believes that the potential vernal pools are likely to pass certification standards if the Town were to follow through with the certification process. MA Fish and Wildlife encourages the Town to certify pools on its own property and require developers to certify pools on any property requiring permits from the Town (Harper).

Water-Based Recreation and Access

A town-wide survey of 600 residents was administered as a part of the Parks, Open Space and Athletic Field Master Plan. The need for more water-based recreation opportunities and increased access to the town's water bodies rose to the top as the third greatest priority. There is a beach at Choate Pond but high bacteria counts mean this is not always a desirable or safe place to swim. Due to the water quality challenges of the town's ponds, the master plan focuses on the Charles River as the primary area for increased water-based recreation in town (Parks, Open Space and Athletic Field Master Plan Report 2013). Since the master planning process described above, the town has acted to increase access by improving infrastructure at identified recreation sites along the Charles River including

There is canoe and kayak access to Bresnahan's Landing off of Village Street and at Norfolk Launch at River Road in Norfolk. The 3.3-mile distance between launches brings paddlers along the north edge of Populatic Pond where paddlers can find the pond outflow into the Charles River and resume the journey along the Charles to a takeout at River Road in Norfolk. Obstacles such as downed branches, beaver dams, and high or low flow can impede a paddler's way. Experienced paddlers who can handle fast water could paddle as far as South Natick before having to portage over the next dam on the river (Bresnahan's Landing Paddling Map 2015).

The Charles River Amphitheater, a town-owned open space, is the best area to view the Charles River in Medway. It is conveniently located off of Village Street near the center of Medway and includes walking trails and a canoe and kayak launch however, the lack of directional signage on Village Street prevents people from finding this hidden treasure. Paddlers can head upstream, potentially as far as the West Medway dam. There is no beach for swimming, but the brochure guide to Medway's open spaces features a photo of a rock known as Swimming Rock in the river at the Charles River Amphitheater (Guide to Medway's Open Spaces 2015). The Town is taking steps to improve the facilities at the amphitheater. The Medway Community Preservation Committee allocated funds to install a new fence at the site in May 2017 (Committee Meeting Minutes, May 1, 2017).

The Charles River Meadowlands Initiative is an effort by citizens of the towns of Bellingham, Franklin, and Medway to enhance the conservation and recreation opportunities of the US Army Corps of Engineer (USACE) lands of the Charles River Natural Valley Storage Area. In 1970 the USACE preserved hundreds of wetlands for flood control purposes and since then has made sure that these flood plain areas are not altered in any way that would diminish their capacity to contain, slow, and absorb floodwaters. Citizens and the local governments of the three towns are in support of this initiative which seeks to improve recreation access to the USACE lands and other nearby lands owned by the towns. In doing so they intend to join together across town borders to promote passive recreation and the positive economic impacts that can accompany it. Citizens and town governments are the drivers in this initiative. For different reasons, USACE, MA Fish & Game, and DCR are all supportive, but unwilling to take a leadership role (The Charles River Meadowlands Plan for Bellingham, Franklin, and Medway).

Medway has several public parcels that are contiguous with the Charles River in Franklin and fifty-two acres USACE lands. Medway stands to reap social, cultural, economic, and public health benefits from the increased recreation and community activities proposed by this initiative. Increased connectivity and wildlife habitat, due to additional anticipated land conservation efforts, would benefit Medway's biodiversity and the ecosystem services of its lands (The Charles River Meadowlands Plan for Bellingham, Franklin, and Medway).

D. Natural Communities (Associated Vegetation and Wildlife)

Medway is located within the Southern New England Coastal Plains Ecoregion– an area with coastal plains and a few low hills.

Vegetation

Forest

Medway's vegetation is dominated by upland forests in areas previously cleared for pastures and farmland. Central oak-hickory hardwood forests mixed with pine make up most of the forest cover. The town also contains sugar maple-birch-beech-ash transitional hardwood forests and areas with elm-ash-red maple and red and white pines (BioMap2).

Highbush blueberries, sweet pepperbush, witch hazel, and hazelnut populate the understory communities in moist upland forests while in the drier forests lowbush blueberries, sheep laurel and huckleberry dominate. Spotted wintergreen, wintergreen and partridgeberry are also common, as well as lady's slippers, Canada mayflower, trillium and false Solomon's seal (OSRP 2010).

Medway's Northern swamp forests are a mix of the hardwoods of maple, oak, ash and evergreens, such as white pine in sandy soil and white cedar in clay rich soils. These forests are also home to the highbush blueberries and swamp azaleas also found in the upland forests (OSRP 2010).

Forest land in Medway declined by more than twenty six percent between 1971 and 1999 due to development and forest succession. More than 1,000 acres were converted to other uses (OSRP 2010).

Meadow

Meadow, once a common type of ecosystem of Medway's coastal plains, makes up a smaller proportion of the landscape. Broad meadows historically blanketed the lands along the Charles River. Meadow habitat declined significantly between 1971 and 1999, dropping from 246 acres

to just 30 acres (OSRP 2010). The Chicken Brook corridor has the highest concentration of meadows and pasture land in town (Conley & Serrill). Wildflowers including Queen Anne's lace, golden rod, wild asters, milkweed and joe pye weed are prevalent in the drier meadow areas, while in the wetland meadows bulrush, jewelweed and red cardinal flowers are more common (OSRP 2010).

Public Shade Trees

Public shade trees are under the care and oversight of Medway's Tree Warden, who works under the Department of Public Services and determines whether trees in public areas should be taken down or should remain as public shade trees. The warden also helps enforce rules and regulations associated with trees along scenic roads. Twenty-five roadways in Medway currently have this status. Any cutting or removal of trees in the right-of-way of a scenic road requires an application for the Planning Board for a Scenic Road Work Permit (OSRP 2010).

Exemplary Habitats

BioMap2

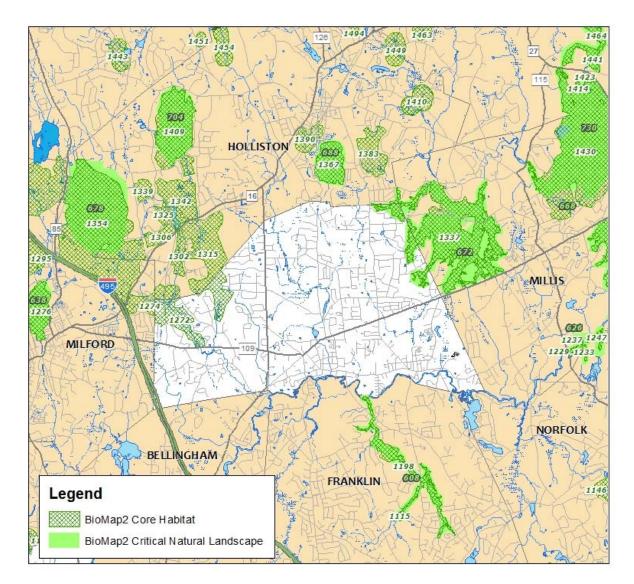
In 2012, the Massachusetts Natural Heritage Endangered Species Program (NHESP), of the Massachusetts Division of Fish and Wildlife in partnership with The Nature Conservancy (TNC), produced *BioMap2: Conserving the Biodiversity of Massachusetts in a Changing World*. This study combined information about rare species, natural community data, and spatial data identifying wildlife species and habitats. BioMap2 also integrates TNC's assessment of large, well-connected, and intact ecosystems and landscapes across the Commonwealth, incorporating concepts of ecosystem resilience to address anticipated climate change impacts.

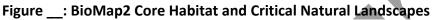
BioMap2 identifies two ecological components, Core Habitats and Critical Natural Landscapes (CNL), used to determine the areas of Massachusetts most in need of protection in order to preserve and promote biodiversity. Core Habitats are the most viable habitat for rare plants and animals or exemplary natural communities. CNL areas serve as supporting buffers around Core Habitats. They can be large undeveloped patches of vegetation, large "road less" areas, and undeveloped watersheds. Protection of CNLs provides habitat for wide-ranging native species, supports intact ecological processes, maintains connectivity among habitat, and enhances ecological resilience to natural and anthropogenic disturbances (BioMap2).

One Wetland Core Habitat, two Aquatic Core Habitats, three Species of Concern Core Habitats, two Aquatic Core Buffer CNL areas, and one Wetland Core Buffer CNL area are identified within Medway. The three Species of Concern Core Habitats are located in the northwest area of Hopping Brook and extend into Holliston. These areas provide large un-fragmented open spaces along Hopping Brook's riparian corridors and are habitat for the rare spotted turtle (*Clemmys guttata*) and four-toed salamander (*Hemidactylium scutatum*). In the northeast, Aquatic and Wetland Core Buffer CNLs overlap the Aquatic and Wetland Core Habitats in the Black Swamp. This habitat supports the Spatterdock darner (*Rhionaescha mutate*), a rare dragonfly species (BioMap2). The

second Aquatic Core Habitat and Species of Concern Core Habitat are located predominantly in the town of Franklin but extend into Medway where Sherman Brook meets the Charles River. This area also provides habitat for the four-toed salamander (BioMap2).

Based on 2012 data, 320 acres of open space are protected in perpetuity, 4.3% of Medway's total land area. BioMap2 Core Habitat areas make up 352 acres of which 51 acres, or 14.5 %, is protected. CNL areas make up 163 acres of which fifteen acres, or nine percent, is protected (BioMap2). As these areas are all at the periphery of town, their conservation would also be beneficial to adjacent towns. Therefore, conservation efforts should be collaborative with neighboring towns.



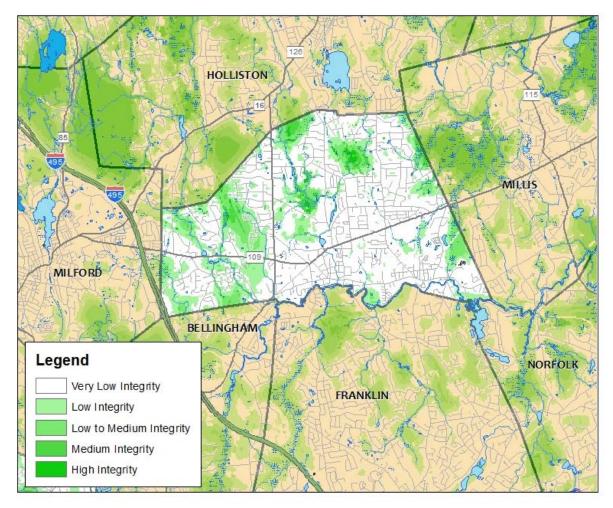


CAPS

The University of Massachusetts Landscape Ecology Laboratory's Conservation and Assessment and Prioritization System (CAPS) is "an ecosystem-based (coarse-filter) approach for assessing the ecological integrity of lands and waters and subsequently identifying and prioritizing land for habitat and biodiversity conservation." CAPS defines ecological integrity as "the ability of an area to support biodiversity and the ecosystem processes necessary to sustain biodiversity over the long term." This system provides a second way to identify areas for conservation. The Index of Ecological Integrity ranking system of CAPS includes metrics of connectivity, traffic volume, distance from roads, and unimpeded stream flow. This contrasts with BioMap2 which focuses on rare species habitat. CAPS mapping identifies the top fifty percent of lands with the highest ecological integrity (Conley & Serrill). Figure 4-X illustrates the integrated statewide, watershed and ecoregion assessment of index of ecological integrity. The darker the color, the higher the integrity value. Figure 4-X illustrates the top 50% of landscape types within Medway for ecological integrity.

In addition to the areas identified by BioMap2, CAPS identified areas within the Chicken Brook corridor as important for biodiversity and ecosystem health. Kirby Swamp and an area within the Adams Conservation Area utility corridor were identified as having high value for wetland and aquatic habitat (Conley & Serrill).

Figure 4-____: Integrated Index of Ecological Integrity Map



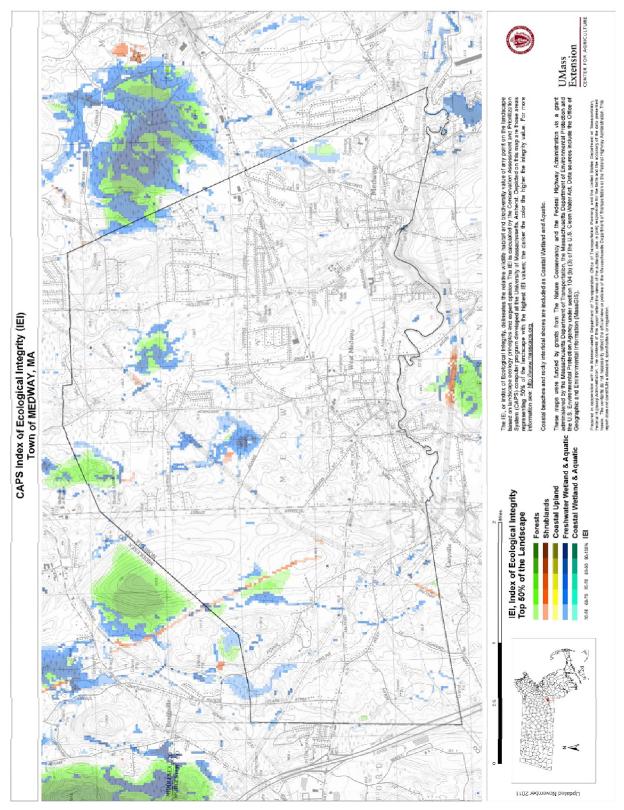


Figure 4-X: Index of Ecological Integrity, Top 50% of Landscapes in Medway

Rare, Threatened and Endangered Plants

According to the NHESP, Medway currently has no rare or endangered plant species (Harper). Previously, two vascular plant species, the Rigid flax and the Saline sedge were listed as endangered (OSRP 2010). However, these species are no longer on the list. There are also no Priority Natural Communities listed by NHESP, but this could be due to lack of survey effort (Harper).

Threats to Natural Communities

In addition to BioMap2 Core Habitats, there are areas of Priority Natural Communities distinction just outside the town's borders in Holliston. These habitats, home to rare and endangered species, are connected and supported by habitats within Medway. Since wildlife is dependent on natural habitats for food, water, shelter and reproduction and these resources have been fragmented due to the encroaching development, it can be expected that biodiversity will suffer unless these natural habitats are protected.

The Town owns much of the land along Chicken Brook and Kirby Swamp. While this doesn't support state-listed rare species, NHESP recognizes it as a significant complex of uplands and wetlands. Town-owned and non-town-owned lands not yet protected as open space are vulnerable to development. Similarly, NHESP encourages the conservation of another tract of undeveloped wetlands and uplands between Winthrop and Holliston Streets, north of Lovering Street. Conserving these areas would help protect the more common species that contribute to the town's biodiversity and the health of its ecosystems (Harper). In addition, land conservation that increases connectivity of the Core Habitats and Critical Natural Landscapes with other open space parcels can increase biodiversity and ecosystem services in town.

E. Fisheries and Wildlife

The primary wildlife corridors in Medway are generally along the major waterways, including the Charles River, Chicken Brook and Hopping Brook. Both Chicken Brook and Hopping Brook flow into the Charles. Hopping Brook provides a link to Cedar Swamp in Holliston and Chicken Brook flows into the Charles nearly opposite its confluence with Mine Brook flowing in from Franklin, thus forming a link to Franklin (OSRP 2010).

In addition, electrical transmission rights-of-way also serve as corridors. They provide links between Hopping Brook and Chicken Brook and also link those corridors with Lake Winthrop in Holliston and Dopping Brook in Holliston and Sherborn (OSRP 2010).

Mammals

From 2010 OSRP: biodiversity is stable with at least twenty-one species of mammals (Who says this is "stable." What is the status of mammals now?)

Birds

?

Reptiles/Amphibians

One species, a reptile, is listed as of "special concern" in Medway. A species of "special concern" is a native species documented by biological research to have suffered a decline that could threaten the species if allowed to continue unchecked. Or it refers to a species which occurs in such small numbers or with such restricted distribution or specialized habitat requirements that it could easily become threatened within Massachusetts.

Table 4-1: Reptile of Special Concern in Medway

Scientific Name	Common Name		MESA* Status	
Glyptemys insulpta	Wood turtle		Special Concern	
Source: Harper, Lynn. MassWildlife Letter. August 21, 2017.				
*MESA – Massachusetts Endangered S	Species Act			

Fact Sheet: https://www.mass.gov/files/documents/2016/08/tm/glyptemys-insculpta.pdf

As discussed previously, BioMap2 Core Habitat areas in Medway provide habitat for the spotted turtle (*Clemmys guttata*) and four-toed salamander (*Hemidactylium scutatum*). Reptile and amphibian species such as these rely on both aquatic and nearby terrestrial habitats during their life cycles.

Fish

There are no Coldwater Fisheries Resource streams in Medway (Harper).

Insects

Although there is no detailed inventory of insects in Medway...?

F. Scenic Resources and Unique Environments

INSERT SCENIC RESOURCES AND UNIQUE ENVIRONMENTS MAP

Scenic Vistas

Noteworthy scenes of attractive to historical structures surrounded by fields and forests contribute to Medway's character. In addition, the Black Swamp, located on the Millis town line, is a scenic and unique environment worthy of protection. Other scenic and unique resources include the Chicken Brook corridor, which offers the potential to expand and connect existing trails into a network connecting with a trail in Holliston, and the BioMap2 Core Habitats of Medway in the northwestern corner near the borders with Holliston and Milford (OSRP 2010).

Scenic Roadways

The Town of Medway has designated twenty-five roads as *scenic roads*, roads that have been maintained for 50+ years and have homes that reflect that heritage with trees and/or stone walls intact. They are protected from unnecessary changes and allow people to continue enjoying the town as it was in an earlier time (OSRP 2010).

Table 4-2: Scenic Roads in Medway		
Street	From	То
Adams Street	Winthrop Street	Summer Street
Brigham Lane (now Country Lane)	Main Street	Village Street
Causeway Street	Holliston Street	Millis Town Line
Charles River Road	Village Street	Charles River
Ellis Street	Coffee Street	Holliston Street
Elm Street	Main Street	Evergreen Street
Evergreen Street	Main Street	Elm Street
Farm Street	Village Street	Millis Town Line
Fisher Street	West Street	Holliston Town Line
Franklin Street	Main Street	Village Street
Granite Street	West Street	End
Guernsey Street	Cottage Street	Lincoln Street
High Street	Main Street	Village Street
Highland Street	Main Street	Summer Street
Hill Street	Winthrop Street	Holliston Town Line
Lincoln Street	Main Street	Village Street
Lovering Street	Winthrop Street	Summer Street
Oakland Street	Main Street	Village Street
Partridge Street	Ward's Lane	Winthrop Street
Pearl Street	Walker Street	End
Populatic Street	Village Street	Franklin Town Line
Village Street	In its entirety	
Walker Street	Populatic Street	Franklin Town Line
Wellington Street	Cottage Street	High Street

Table 4-2: Scenic Roads in Medway

Winthrop Street	Main Street	Holliston Town Line
Source: Town of Medway Scenic Roads Rules an		

* These roads, or in most cases, sections of roads, were designated as scenic roads in the Annual Town Meetings held on December 20, 1975 and May 14, 2001.

Historic Districts and Structures

There are many historic buildings and sites throughout Medway, several of which are referenced in this report. In 1988, Rabbit Hill in West Medway was officially registered as a National Historical District because of its historic homes and structures. More recently, Medway Village was also added to the National Register of Historic Places (OSRP 2010).

G. Environmental Challenges

Intro needed

Drinking Water Supply

One serious issue is the adequacy of the domestic water supply. Medway has made significant efforts to solve this problem but conservation of water supplies and protection of water resources remain a concern. The anticipated increase in development makes this an imperative issue for the future sustainability of the town. The quality of drinking water sources is not a problem at present but conserving land and managing possible water pollutants is important to safeguard resources in the future. Pollution from land use can affect drinking water sources because chemicals can migrate through porous sand and gravel into ground water. It is important to identify and protect undeveloped land within aquifer recharge areas.

Surface Water Quality, Streamflow, and Temperature

Volunteers from the Charles River Watershed Association take water samples at the water quality monitoring site at the Shaw Street Bridge over the Charles River monthly. The average 2016 *E. coli* level in the water at this site was 129 colony forming units per 100 milliliters. This is just above the swimming standard of 126 colony forming units per 100 milliliters. A look at the *E. coli* concentration for each of the samples taken monthly in 2016 indicates that six out of the twelve days had unsafe *E. coli* levels for swimming. The *E. coli* standard for boating is 630 colony forming units per 100 milliliters, therefore the Charles River along the border with Medway is safe for boating (Charles River Monthly Monitoring 2016 Year-end Report).

Thirteen percent of Medway's land is covered by impermeable surfaces. According to *Green Streets*, "when impervious area in a watershed reaches ten percent, stream ecosystems begin to show evidence of degradation, and coverage more than thirty percent is associated with severe,

practically irreversible degradation." (Conley & Serrill) Non-point source pollution from Medway contributes to water quality degradation in the Charles River. Temperatures of the Charles River have been steadily increasing and have been above healthy levels (Charles River Monthly Monitoring 2016 Year-end Report). Waters warmed when passing over impermeable surfaces can contribute to this trend.

As discussed previously, the suburban and rural upper Charles River communities, of which Medway is one, are experiencing one of the fastest development rates in Massachusetts. The demand for water has the potential to cause lower flows of the Charles River. Providing drinking water to citizens and making sure that enough water from the tributaries in Medway reach the Charles River to maintain healthy river flow heights and rate is a challenge (Charles River Issues).

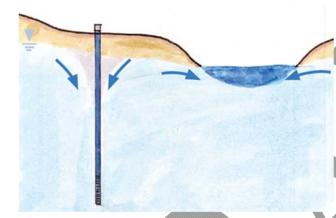


Image credit: Conley & Serrill "A pumping well intercepts the groundwater that would flow into the river, decreasing river flow. In times of drought, the pumping well can draw from the river and reduce base flow." (Conley & Serrill)

Flooding

Flooding has been an issue in several areas of town including Walker Street Bridge, Milford Street Culvert, Main Street Culvert, and the Town's Populatic Well. Population growth and other development have increased the amount of impervious surface, thus producing more runoff than the drainage systems were designed for. Cleaning of the lines and drainage structures is essential to maintain capacity as high as possible (OSRP 2010). Medway adopted a Stormwater Management Bylaw in 2017.

A regional sewer treatment plant is located in Medway. It serves the towns of Medway, Franklin, Millis and Bellingham. It currently discharges its treated effluent into the Charles River. A major challenge is to find ways to keep that water local by infiltrating it into the ground and/or using it as a source of irrigation. Additionally, Medway is reaching its allotted capacity at the treatment plant which has implications for future development. Once capacity is reached, future developments would not be able to tie into the sewer system, and would need private septic systems, which would have continued implications for groundwater quality.

The Town has two former landfills. One is located off Broad Street and the other off Highland Street. Neither is shown as capped on the State website, though both are shown as inactive. The

Town's Highway Garage is adjacent to the one off Broad Street (OSRP 2010). Have these been capped since? Does the landfill pose a pollution threat during flooding?

Loss of Open Space to Development

Medway has lost more than twenty six percent of its forest land between 1971 and 1999. However, it now has an Open Space Residential Design bylaw requiring that fifty percent of a developed parcel remain as open space. This and the Adult Retirement Community Planned Unit Development bylaw, which also requires that open space be provided, will help to reduce such losses in the future (OSRP 2010). Is this true? Have you seen a reduction in forest loss?

Erosion and Sedimentation

Erosion and sedimentation are problems primarily from new construction. A wetlands bylaw, Planning Board Rules and Regulations, and a storm water management bylaw have all worked to reduce this problem (OSRP 2010).

Environmental Justice Populations

There are no environmental justice populations in Medway. Also, park and conservation resources are well distributed across the town (OSRP 2010).

Hazardous Waste and Brownfield Areas

Under the Massachusetts General Laws, Chapter 21E sites are contaminated by oil or other hazardous material and are subject to special restrictions for redevelopment. Such sites are classified by tiers based on their level of contamination and their owner's compliance with regulations. The Massachusetts Department of Environmental Protection (MassDEP) has a searchable database that lists forty-six reportable spills of oil and/or hazardous materials in Medway from 1987 through December 2017. Most of those sites, including some former gas station sites, are classified in a status that poses no significant risk, meaning the release has been properly cleaned up (MassDEP Searchable Sites).

There is one Tier II and two Tier 1D Chapter 21E sites in Medway as follows:

Site Name	Address	Zoning	Tier	
Main Street Shell	86 Main Street	C-I	II	
Medway Oil Facility	37 Broad Street	C-III	1D	
NA	8 Populatic Street	AR-II	1D	

Table 4-3: Tier Classified Chapter 21E Brownfield Sites in Medway

Source: MassGIS

One gas station on Main Street is classified as Tier II, meaning that permits from the Mass DEP are not required and response action may be performed under the supervision of a Licensed Site Professional, without prior Departmental approval. The gas station is in cleanup phase and is located within the proposed Chapter 40R overlay district on Main Street. The district is currently being targeted for mixed-use redevelopment.

The Medway Oil Facility and 8 Populatic Street are located in the C-III and AR-II zoning districts respectively and are designated as Tier 1D sites. Tier 1D includes any site where the responsible party fails to provide a required submittal to Mass DEP by a specified deadline. A site is categorically classified as Tier 1D on the date of its applicable transition deadline and is assessed annual compliance fees should the responsible party fail to submit certain paperwork to the department by the applicable deadline¹. Both Tier 1D sites are unlikely to be targeted for housing-related redevelopment in the foreseeable future (OSRP 2010).

It should be noted that the above list presents those sites on a list of sites with reported spills that has been prepared by DEP. It is not meant to suggest that these sites are undevelopable, nor it is intended here to imply that these are the only sites that may be hindered for development due to past spills. That judgment must necessarily be made on a site-by-site basis (OSRP 2010).

Invasive Species

One unfortunate change in Medway is the spread of non-native, invasive plants. They are establishing themselves on roadside, fields, woods, ponds and waterways - displacing native species. Bush honeysuckle, Japanese knotweed, buckthorn, and oriental bittersweet are common invasive species in Medway (OSRP 2010).

Sources

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ADA Self-Evaluation Report Town of Medway - Open Space and Recreation Plan September 27, 2017

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Section 1 Transition Plan and Facility Inventories Section 2 Administrative Policies

Section 1: Transition Plan

On September 27, 2017, Anne Capra (consultant) and Jack Mee (Building Inspector, Disability Coordinator) assessed town-owned parks and recreation facilities for Americans with Disability Act (ADA) compliance. In addition to the facilities inventoried in this plan, other private or publicly owned recreation facilities exist in town that are not included in this survey because they are not under the care and control of the Town of Medway.

The following plan provides a summary of each of the town-owned recreation and conservation areas, recommended actions for improving accessibility, and a Facility Inventory Worksheet with a detailed assessment of each of the features present and comments regarding the accessibility of the feature.

Recommendations for Improved Accessibility

State and Local government facilities are called Title II facilities. For-profit and non-profit establishments are called Title III facilities, and are required to meet accessibility standards. Funding sources may also have certain accessibility standards attached to them. A public entity may not deny the benefits of its programs, activities, and services to individuals with disabilities because its facilities are inaccessible. A public entity's services, programs, or activities, when viewed in their entirety, must be readily accessible to and usable by individuals with disabilities. This standard, known as "program accessibility," applies to all existing facilities of a public entity. Public entities, however, are not necessarily required to make each of their existing facilities accessible.

All facilities designed, constructed, or altered by, on behalf of, or for the use of a public entity must be readily accessible and usable by individuals with disabilities, if the construction or alteration is begun after January 26, 1992. There are no standards specific to outdoor recreation facilities. The Unites States Access Board (the Board) has developed standards for Federal outdoor developed areas. Achieving accessibility in outdoor environments has long been challenging due to constraints posed by terrain, the degree of development, construction practices and materials, and other factors. The Board has issued requirements that are now part of the Architectural Barriers Act (ABA) Accessibility Standards and apply to national parks and other outdoor areas developed by the federal government. The new provisions address access to trails, picnic and camping areas, viewing areas, beach access routes and other components of outdoor developed areas on federal sites when newly built or altered. They also provide exceptions for situations where terrain and other factors make compliance impracticable, known as "conditions for exceptions". These criteria can be applied at the municipal level when making decisions about design and modification of new or existing facilities.

Table 1 Conditions for Exceptions

Condition 1	Compliance is not practicable due to terrain. The phrase "not practicable" means not reasonable doable.
Condition 2	Compliance cannot be accomplished with the prevailing construction practices. This condition does not require the use of construction equipment or methods other than those typically used in a particular setting. Prevailing construction practices are those used by most contractors or designers faces with the same or similar projects in the area.
Condition 3	Compliance would fundamentally alter the function or purpose of the facility or the setting. This condition recognizes that public lands provide a wide variety of recreational experiences, from highly developed areas to wilderness areas that appear unchanged from primeval times and provide opportunities for people to experience primitive and challenging conditions. The condition applies where compliance with specific provisions in the technical requirements would fundamentally alter the function or purpose of the facility or the setting.
Condition 4	 Compliance is limited or precluded by any of the following laws, or by decisions or opinions issued or agreements executed pursuant to any of the following laws: Endangered Species Act National Environmental Policy Act National Historic Preservation Act Wilderness Act Other Federal, State, or local law, the purpose of which is to preserve threatened or endangered species; the environment; or archaeological, cultural, historical, or other significant natural features.

Source: United States Access Board. A summary of Accessibility Standards for Outdoor Developed Areas, May 2014.

The removal of accessibility barriers can often be achieved by making simple changes to the physical environment. When and how to create accessibility must be made on a case-by-case basis, taking into consideration such factors as the size, type, and overall financial resources available, and the nature and cost of the access improvements needed. The process of determining what changes are readily achievable is not a one-time effort; access should be re-evaluated annually. Barrier removal that might be difficult to carry out now may be readily achievable later.

Resources:

Title II Requirements for State and Local Governments https://www.ada.gov/taman2.html

United States Access Board, A Summary of Accessibility Standards for Federal Outdoor Developed Areas, May 2014 https://www.access-board.gov/guidelines-and-standards/recreation-facilities

Charles River Amphitheatre

Sanford Street

Existing Conditions: The Charles River Amphitheatre is located behind the Sanford Mills Condominium Association parking lot, off of Sanford Street. The site provides canoe and kayak access to the Charles River, unimproved trails through a small field and open forest, and a picnic and sitting area. A gravel parking lot accommodates three cars at the entrance. This site is not ADA Accessible.

Recommendations for Improved Accessibility:

- 1. Provide directional signage from Sanford Street to the parking lot.
- 2. Consider constructing an ADA accessible path from the parking lot to the picnic area overlooking the Charles River.
- 3. If an accessible path to the picnic area is constructed, create one (1) signed handicapped parking spot in the parking lot closest to the trailhead.

Schedule: 2018-2024



Picnic table and bench at grassy area overlooking Charles River.



Wooden steps at canoe access at Charles River.



Parking lot and trailhead kiosk at end of Sanford Street.

Bresnahan's Landing

57 Village Street

Existing Conditions:

Bresnahan's Landing is a canoe and kayak launch and fishing area on the Charles River, on land formerly owned by the Bresnahan family. Paddlers can paddle downstream to Populatic Pond and takeout at River Street in Norfolk, or depending on conditions and paddling ability, as far as South Natick before having to portage over the next dam. This site is not ADA accessible. There is a small gravel parking lot, lawn with a picnic table and kiosk, and grassed boat ramp. A wooden fence and fence posts restrict vehicle access to the boat launch.



Path to picnic table from parking lot, and site kiosk.

Recommendations for Improved Accessibility:

- 1. Provide an accessible path from the parking lot to an accessible picnic area overlooking the river.
- 2. Dedicate a handicapped parking spot with a sign closest to the proposed accessible path and picnic area.

Schedule: 2018-2024

Responsible Entity:





Gravel parking lot.

Oakland Street Park

82 Oakland Street

Existing Conditions:

Oakland Street Park is one of Medway's primary athletic facilities with soccer fields, basketball courts and a playground. It is also adjacent to the Medway Senior Center. The parking lots for both facilities serve as overflow for large events. Currently at the park, there are two signed handicapped parking spots next to the playground and between the basketball court and soccer field, however a mobility impaired person would not be able to access the recreation facilities due to the lawn between the pavement and the site. Seasonal port-o-potty stalls serve as bathrooms (non-wheelchair accessible). With the exception of the two handicapped parking spots, this site is not currently accessible.



Existing parking lot next to basketball court.

In 2017, the Town completed a Master Plan for a full renovation of

the park, reorganizing the parking, circulation, playground area, and other non-athletic portions of the park to create a more efficient and cohesive core. Other than an expansion to the field closest to Oakland Street due to the relocation of the playground, the athletic fields and basketball court remain unchanged. The existing small storage building will be replaced with a bathroom and office/storage structure. A new pavilion will be built for public use. All of these renovations and improvements will meet ADA accessibility standards and greatly improve the user experience. Construction is anticipated to begin in 2018.

Recommendations for Improved Accessibility: Implement Oakland Street Park Master Plan.

Schedule: 2018

Responsible Entity: Board of Selectmen, Department of Public Services



Handicapped parking spot in front of playground entrance.

North Street Park and Playground

North Street, at corner of School Street

Existing Conditions:

The North Street Park and Playground has a playground and basketball court. This park is not accessible. Access to the playground and basketball court are from the sidewalk which is raised above the road without a curb cut. All parking is on the street. A sloped lawn further separates the parking lot from the fenced entrances. The playground is a mulched woodchip surface. There are a few benches and two picnic tables, each offering a comfortable resting spot, however, there is no accessible route to them.



Lawn and woodchips in playground area.

Recommendations for Improved Accessibility:

- 1. Create an accessible path from the sidewalk to a sitting area inside the park at the edge of the playground.
- 2. Identify if there is room to create one handicapped parking space on the site (off-road), next to the proposed accessible path and sitting area. If not feasible, consider a curb cut to the sidewalk close to the park entrance.

Schedule: 2018-2024



Entrance to playground from street and sidewalk.



Basketball court, bike rack, and lawn.

Henry Garnsey Canine Recreation Park

302 Village Street

Existing Conditions:

The Henry Garnsey Canine Recreation Park is an off-leash fenced dog park at the intersection of Village and Cottage Streets. There is a gravel parking lot for six to eight cars, some benches, and a large kiosk/shed with tools for spreading wood chips, and posted rules and regulations. This site is not accessible.

Recommendations for Improved Accessibility:

This site may not be suitable for improved accessibility due to off-leash dogs.



Dog and owner playing in park.

Schedule: N/A



Double gate at entrance to prevent unleashed dogs from escaping to parking lot.



Kiosk and shed with tools and posted information.

Ohnemus Picnic Area

Between 311 and 315 Village Street

Existing Conditions:

Ohnemus Picnic Area is a small area with picnic benches on the shore of the Charles River, next door to the Police Station. The park was created in memorial to Kurt Ohnemus, a Medway Scout leader, by his son as an Eagle Scout project. This sitting area is accessible from a natural surface foot path through the woods, with no on-site parking. This site is not accessible.



Scenic sitting area with stone benches overlooking the Charles River.

Recommendations for Improved Accessibility:

- 1. Create an accessible path from the Police Station parking lot to the sitting area. The benches would need to re-located onto a level surface with suitable turning radius for a wheelchair.
- 2. A handicapped parking space would need to be established in the parking lot next to the trail entrance.

Schedule: 2018-2024



The shore of the Charles River below the sitting area.



Memorial inscription on a stone bench, with Boy Scouts of America insignia.

Village Street #1

304 Village Street – next door to Henry Garnsey Canine Recreation Park

Existing Conditions:

Small road side park with benches and a flagpole. A sidewalk on Village Street offers convenient access for pedestrians however, this park is not accessible due to the lawn in between the sidewalk and benches.

Recommendations for Improved Accessibility:

1. Created an accessible path the sitting area with benches.

Schedule: 2018-2024



Sitting area with benches next to flagpole.



Shady bench under a tree.

Grand Army of the Republic Memorial

Across from 315 Village Street

Existing Conditions:

The Grand Army of the Republic Memorial is a small park and memorial. Access to this site is from a sidewalk on Village Street onto a level brick walkway around the memorials. The benches are not accessible however due to their location on the lawn just off of the level brick area.

Recommendations for Improved Accessibility:

1. Relocate the benches onto the level brick walkway.

Schedule: 2018-2024



Deerfield Street Pond

Across from 20 Deerfield Street

Existing Conditions:

Deerfield Street Pond is a very small pond located across the street from 20 Deerfield Street, with a narrow, natural surface trail around the pond. Access to the pond is along a short natural surface path through a forested area. This site is not accessible, and parking is on the road. A curb and lawn separate the road from the trailhead.

Recommendations for Improved Accessibility:

This site may not be suitable for improvements as an ADA accessible facility due to the small size of the pond and limited recreational value it offers.

Schedule: N/A



Approach to pond from trailhead.



Trailhead on Deerfield Street.

Adams Street Meadow Conservation Area

Adams Street

Existing Conditions:

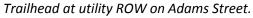
Adams Street Meadow Conservation Area is one of Medway's newest passive recreation facilities. A trailhead on Adams Street follows the edge of the utility right-of-way, old farm roads, a series of new foot bridges, and the Chicken Brook boardwalk. This site is not accessible

Recommendations for Improved Accessibility: N/A

Schedule: N/A

Tril

Responsible Entity: N/A





Recently installed foot bridge along trail.



Trail along farm road.



View of pond from trail.

Medway Community Farm 50 Winthrop Street

Existing Conditions:

Medway Community Farm, Inc. is a non-profit organization that leases seven acres and the dwellings at 50 Winthrop Street from the Town of Medway since 2009. The Farm operates a CSA, farm stand, and educational programs on the site. This site is not accessible.

Recommendations for Improved Accessibility:

The farm stand is located in a small shed approximately 50' from the gravel parking lot. To make the shed ADA accessible, an accessible path from the parking lot to the shed would be needed, and a ramped entrance into



Gravel driveway and road to hoop house and farm field.

the shed. One handicapped parking spot next to the accessible path would also be needed.

Schedule:	N/A
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Kiosk and farm stand, next to parking lot.



Rear entrance to farm stand.

Idylbrook Park

Kimberly Drive and Wards Lane

Existing Conditions:

Idylbrook Park is a complex of athletic fields for soccer and baseball. A mowed path provides a loop trail around the athletic fields through a natural area. Two parking lots serve the park: at the end of Kimberly Drive and Wards Lane. One signed handicapped parking spot exists in each parking lot. The baseball diamond is at the end of a gated dirt access road from the parking lot off of Kimberly Drive. Although a signed parking spot exists in each parking lot, none of the fields are accessible.



Parking lot and kiosk at edge of soccer fields.

Recommendations for Improved Accessibility:

- 1. Upgrade the gated access road from dirt and grass to a crushed aggregate (3/8 minus) path.
- 2. Install benches next to the parking lot so that people who cannot walk far can get out of their cars and site at the edge of the playing fields.

Schedule: 2018-2024



Handicapped parking spot next to soccer fields.



Gated access road to baseball diamond.

Cassidy Field

Cassidy Field Road, off Winthrop Street

Existing Conditions:

The Cassidy Field complex is home to Medway Youth baseball. The complex consists of baseball diamonds, a batting cage, a concession stand and sitting area with picnic tables, bathrooms, and a trail connection to Choate Park. The parking lot, concession area, and bathrooms are handicapped accessible. The picnic area is not accessible due to the uneven grass and dirt area.



Handicapped parking spot and entrance to complex.

Recommendations for Improved Accessibility:

1. Locate a sitting area on a paved surface contiguous with the paved area around the concession stand and bathrooms.

Schedule: 2018-2024



Picnic area on patchy lawn.



Handicapped accessible bathrooms. Bathrooms were locked at the time of site visit and are assumed to meet ADA standards because of the signs on the doors.

Choate Park Complex Oak Street

Existing Conditions:

The Choate Park Complex is the centerpiece of Medway's public spaces. The park consists of a series of active and passive recreational facilities surrounding Choate Pond including playgrounds for different age groups, tennis, basketball and volleyball courts, and trail around the pond connecting to Cassidy Field. Thayer Homestead, also owned by the Town of Medway, is adjacent to the park and is the location of community gatherings and events.

In 2017, a park master plan was completed detailing a full renovation of the park, including ADA accesibility. Construction will begin in 2018. The proposed project



Existing walkway and playground at park.

concentrates primarily on the "core area" of Choate Park including a new wood pavilion, bathrooms, playgrounds for multiple age groups, a tricycle path, water spray feature, sitting areas, and new trees. The project will improve the pathway around Choate Pond

and a branch connection up to Cassidy Fields to provide a firm, stable, slip-resistant surface of stabilized decomposed granite to satisfy accessibility requirements. The renovated pathway will be suitable for maintenance and public safety vehicle access, and will be at an ADA-accessible slope with the exception of the steeply sloped portion to the north of the site between the bridge and Cassidy Field, where regrading for accessibility would create too large a disturbance area. Occasional seating is provided along this pathway.

Recommendations for Improved Accessibility:

Implement master plan.

Schedule: 2018



Existing picnic area next to Choate Pond.



Paved walkway across dam at Choate Pond.

Town of Medway The Americans with Disabilities Act (ADA) Policy

<u>Intent</u>

The Town of Medway is committed to complying with the Americans with Disabilities Act , as amended, as well Massachusetts General Laws Chapter 151B, jointly referred to herein as the "ADA."

Policy

This Policy is adopted to facilitate and ensure compliance with the ADA for the Town of Medway facilities and employees. Program applicants, participants, members of the general public, employees, and job applicants will not be discriminated against on the basis of disability in their participation in Town programs, activities and services. This Policy provides an overview of individuals' rights under the ADA. It is not intended to address every possible situation nor does it compel the Town to act in a manner not required by the ADA. The Policy supplements other Town policies.

Town Facilities/Programs:

All Town boards, committees, and departments that are planning new construction or acquisitions through purchase, rental, or lease of facilities, or remodeling and/or additions to existing facilities shall ensure that such construction or acquisitions meet the requirements of the ADA. All Town boards, committees and departments shall also consider whether existing facilities are ADA compliant.

Similarly, all Town boards, committees and departments that run programs or activities or provide services to the public are required to ensure compliance with the ADA. Compliance may require the Town to provide an accommodation to the individual.

Employees:

The Town is an equal opportunity employer. It does not discriminate in any terms or conditions of employment on the basis of any legally protected classification, including on the basis of disability.

Pre-offer inquiries are made only regarding an applicant's ability to perform the duties of the position. Post-offer, pre-employment inquiries may be more broad, but the Town will only rely upon the results of any such inquiries to determine whether an applicant is able to perform the essential functions of the position for which the applicant has applied with or without a reasonable accommodation. Such post-offer inquiries are made based on the classification for which the offer of employment is made. After beginning employment, employees may be required to provide medical documentation and/or submit to an examination by a Town-appointed physician when the exam is job-related and consistent with business necessity.

Reasonable accommodation will be made available to qualified individuals with a disability in the application process, at the time of hire or during an employee's employment. Reasonable accommodations may include, but are not limited to, modified application process, modified job duties, modified work schedules, a leave of absence, temporary assigned to a vacant position. Each request for accommodation will be evaluated on a case-by-case basis. The individual must be able to satisfy the job requirements for educational background, employment experience, skills, licenses, and other job-related qualification standards.

Questions

Questions regarding this Policy should be directed to the appropriate ADA Coordinator. The ADA Coordinator for facilities and public programming accessibility is Jack Mee, Building Commissioner. He can be reached at his office at Town Hall, 155 Village Street, Medway, MA 02053. The ADA Coordinator for employment related matters is Katherine Bird, Human Resources Coordinator. She can be reached at her office at Town Hall, 155 Village Street, Medway, MA 02053, by phone at (508) 533-3200, or email at kbird@townofmedway.org.

Grievance Procedure

Anyone who believes his/her rights under this Policy or the ADA have been violated may file a grievance in accordance with this Grievance Procedure.

Step 1 – If an individual wishes to file a grievance, s/he should do so by filing the grievance with the ADA Coordinator. The ADA Coordinator will be available to meet with citizens and employees at mutually convenient times during business hours. When a grievance is filed, the ADA Coordinator will attempt to gather information including, but not limited to, the name, address, phone number of the complainant and the location, date and description of the grievance as well as other information as she may deem appropriate or necessary. If the person filing the grievance desires to remain anonymous, he or she may. Anonymous grievances, however, may limit the Town's ability to fully investigate and resolve the grievance. Reasonable accommodations, such as personal interviews of the complainant, will be made available for persons with disabilities who are unable to submit a written complaint.

Each grievance will be taken seriously. If appropriate, based on the nature of the grievance, the Town will investigate the matter in a timely fashion. After the investigation, if any, is completed, the Town will advise the person who filed the complaint, if identified, of the outcome of the investigation in a format that is sensitive to the needs of the recipient (i.e. verbally, enlarged type face, etc).

If the outcome of the investigation warrants, the Town will act promptly to address the situation. If the grievance is not resolved at this level, it may be processed by the person filing the grievance to the Town Administrator within ten (10) business days.

Step 2 – A written grievance will be submitted to the Town Administrator. Assistance in writing the grievance will be available to individuals requiring such assistance. All written grievances will be responded to in a timely manner by the Town Administrator in a format that is sensitive to the needs of the recipient, (i.e. verbally, enlarged type fact, etc.).

State and Federal Remedies

In addition to seeking internal problem resolution, an individual may also file a formal complaint with either or both of the government agencies listed below. In order to protect the charging party's rights, the employee must file a charge with the Massachusetts Commission Against Discrimination (MCAD) within 300 days from the date of the alleged discriminatory act. A complaint filed under federal law should be filed with the United Stated Equal Employment Opportunity Commission (EEOC) within 180 days from the date of the alleged discriminatory act. If the charge is also covered by the Massachusetts Commission Against Discrimination (MCAD), the filing deadline may be extended to 300 days.

The Massachusetts Commission Against Discrimination (MCAD) Boston Office: The John McCormack Building, One Ashburton Place, Room 601, Boston, MA 02108; (617) 994-6000; <u>www.state.ma.us/mcad</u>

The United States Equal Employment Opportunity Commission (EEOC) John F. Kennedy Federal Building, 475 Government Center, Boston, MA 02203; (800)669-4000

Public Notification

The Town shall post this Policy, in large print, in Town Hall and all other Town-owned buildings where a bulletin board is maintained for either employee or public notices. This Policy shall also be posted on the Town's website.

Board of Selectmen

Maryjane White, Chair Richard A. D'Innocenzo, Vice-Chair Dennis P. Crowley, Clerk Glenn D. Trindade John A. Foresto



Medway Town Hall 155 Village Street Medway, MA 02053 Phone (508) 533-3264 Fax (508) 321-4988

TOWN OF MEDWAY COMMONWEALTH OF MASSACHUSETTS

August 21, 2017

Re: Town of Medway ADA Coordinators

Dear Sir or Madam:

Please be advised that the Town of Medway's American with Disabilities Act (ADA) Coordinator appointments are as follows:

ADA Coordinator for Facilities and Public Programming Accessibility -

Building Commissioner Jack Mee

ADA Coordinator for Employment Related Matters – Human Resources Coordinator Katherine Bird

Sincerely,

Maryjane White Chair, Board of Selectmen Town of Medway, Mass.