



Annual Report: 2019 DEVENS ENTERPRISE COMMISSION

The Commission:

The Devens Enterprise Commission (DEC) is the local regulatory and permitting authority for the Devens Regional Enterprise Zone (DREZ). It is empowered to act as the local planning board, conservation commission, board of health, zoning board of appeals, historic district commission and, in certain instances, as board of selectmen. The DEC carries out these duties in the context of a unique and innovative one-stop unified permitting system, which greatly streamlines the local regulatory process. The DEC consists of 12 gubernatorial appointees, six (6) of whom are nominated by the host communities of Ayer, Harvard and Shirley. Each host community and the Governor also nominate an alternate member. The Commission began operating on June 22, 1995.



DEC Commission members – front row from left to right: Chris Lilly, William Marshall, Robert Gardner. Back row from left to right: Marty Poutry, Melissa Fetterhoff, Paul Routhier, Robert Markley, and newly appointed Commissioner Debra Rivera. Missing from photo: Dix Davis, Duncan Chapman, Jim DeZutter, William Castro, and Jim Pinard.

DEC Commission members currently include Jim DeZutter (Harvard), William Marshall (Chairman, Regional), Paul Routhier (Regional), Marty Poutry (Ayer), William Castro (Shirley), Robert Gardner (Regional), Melissa Fetterhoff (Regional), Chris Lilly

(Regional), Jim Pinard (Ayer), Dix Davis (Regional), Duncan Chapman (Harvard) and Robert Markley (Shirley). The Ayer, Shirley, Harvard and Regional alternate positions remain vacant. Harvard Commissioner Duncan Chapman moved from alternate to full Commissioner early in 2019 and former Judge Robert Gardner joined the Commission over the summer, filling the vacancy left when Armen Demerjian retired in June. Commissioner Demerjian served the DEC for over 12 years. His commitment, expertise, and institutional knowledge of Devens was invaluable to the Commission. Debra Rivera was appointed to the Commission late in 2019 and will be joining the Commission in 2020, filling a Regional Alternate vacancy.

DEC staff includes Director/Land Use Administrator Peter C. Lowitt, FAICP and Environmental Planner Neil Angus, AICP CEP, LEED AP. Director Lowitt oversees the day-to-day activities of the DEC and serves on numerous boards whose interests include planning, vegetated roofs, affordable housing, historic, natural and cultural resources, industrial ecology and eco-industrial development. Working under the supervision of the Director, Environmental Planner Neil Angus provides planning, operational and technical support to the DEC and the public on permitting and regulatory compliance in Devens. Mr Angus serves on the Education Committee of the Massachusetts Chapter of the US Green Building Council.

Additional support staff for the Commission include Executive Assistant Kate Clisham and the following consultants on a contractual basis:

- Building and related inspectional services provided by Gabe Vellante (building), Phil Horgan (electrical), and Jim Bakun (plumbing and gas). The Inspectional Services contract was renewed in 2018 for a three year term.
- Development review services provided by Nitsch Engineering Inc. (civil, stormwater and traffic engineering), CRJA IBI (landscape architecture) and Tech Environmental (industrial performance standards) LEC Environmental (wetland science), and Public Archeological Laboratory (historical/archeological services). This contract was also renewed for a three year term after an RFP process in 2018.
- Housing Monitoring services provided by Metro West Collaborative Development through the Town of Hudson, MA.
- Legal services provided by Lampke and Lampke and McGregor & Legere, P.C.
- Health inspectional and permitting services are provided by Nashoba Associated Boards of Health.
- Part-time accounting services provided by Dexter Stevens and auditing services are provided by Giusti, Hingston and Company.

A complete description of the DEC Organizational Structure is available on-line at: <http://bit.ly/DECorg> .

2019 Project Highlights:

Throughout 2019, the Commission oversaw the continued construction of a number of projects that were permitted in 2018 and issued a number of permits for new and expanding facilities in Devens:

38 Jackson Road - BMS Lab/Office/Cafeteria and Parking Garage Expansion: In late December of 2018 BMS submitted plans for a 26,000sf expansion of its Lab/Office/Cafeteria (LOC) building, including additional parking. The Commission issued the Unified Permit on February 7, 2019 and the project is currently under construction. This expansion provides BMS the ability to hold campus wide meetings of its employees, provides new gym and amenity space as well as parking for its growing number of employees. A covered walkway will connect the new addition to the parking garage and BMS is proposing to expand their on-campus trail/walkway network with a series of walkways/trails connecting the LOC and the Large Scale Cell Culture Facility as well as new proposed outdoor patios on the east and west side of this new addition.



Structural steel erected on the new Lab/Office/Cafeteria building expansion – September 2019

BMS Cryogenics Addition: BMS brought an addition to its Cryogenic Storage facility before the Commission for approval in the Spring of 2019. This 13,000+ sf addition was approved in 46 days. The existing 5,700 sq.ft. Chemical Storage building, was converted to a Cryogenic Facility building in 2015. The Cryogenic Facility stores secured drug substances at refrigeration and freezing temperatures of -40°C and -60°C. This addition will facilitate added storage of drug substance containers and will also act as a facility

for shipment, receiving, and preparation of drug substance materials by road or air transport. The expansion will add space for office, packing, loading dock and storage space as well.

BMS Surface Parking: In May of 2019, BMS completed a 156-space surface parking lot on their campus in front of their new Biologics Development Building. These spaces accommodated their growing number of employees (over 1000). The parking lot included features such as biofiltration landscape islands and preferred parking spaces for electric vehicles and new landscaping to reduce urban heat island impacts.

105 Walker Road – Little Leaf Farms: The third phase of Little Leaf’s greenhouse expansion continued through 2019. By the end of 2019, a ~14,000 square foot office/production building expansion was nearing completion and construction was advancing on the 165,000 sq.ft. phase 3 greenhouse expansion. The

greenhouse operation grows hydroponic lettuce and leafy greens indoors in a completely automated fashion. The facility utilizes over 25,000 mobile gutters that automatically move the plants as they grow through their 25 day growing cycle. Little Leaf Farms harvests, packages and delivers lettuce to local grocers, food service providers, and schools in New England. The greenhouse and office expansion are on a 12-acre parcel immediately adjacent to their existing facility. The owner combined the two parcels. A large landscape berm was constructed and raised higher and extended longer than originally permitted to complement the existing vegetated buffer between the facility and Walker Road and provide a better year-round visual screen to help buffer the facility expansion from residents along Walker Road. As 2019 drew to a close, the Applicant was working with Natural Heritage Endangered Species program staff and Devens staff to facilitate water and sewer utility connections to the nearby Devens wastewater treatment plant, so as to reduce concerns about water usage from the Town of Shirley. Little Leaf Farms’

new expansion includes a second rainwater harvesting basin which collects roof runoff from the greenhouse and uses it to irrigate the lettuce. Once complete, the property will have more than 9 acres of greenhouse (>400,000 sq.ft.) for growing lettuce. The informal trail that ran through this expansion parcel was relocated around this third phase and provides access from Walker Road (off the driveway entrance to the Devens Wastewater Treatment Plant) to other North Post trails on Devens and within the Oxbow National Wildlife Refuge. This project continues to contribute to the locally grown movement in Massachusetts.



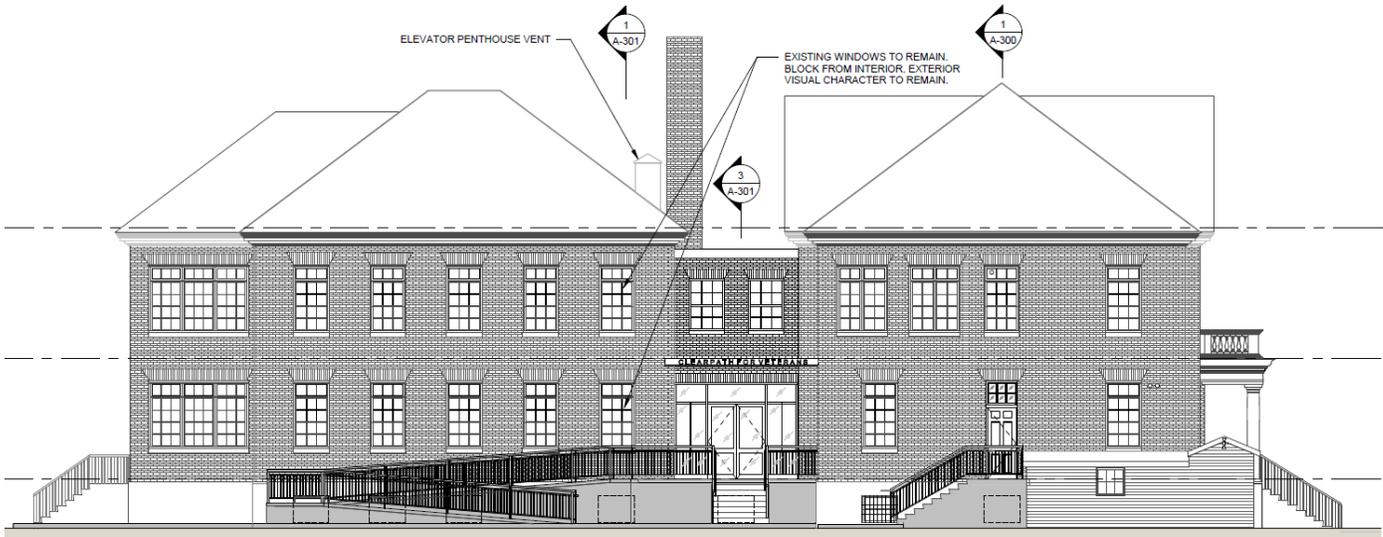
Aerial View of Little Leaf Farms facility on the Devens North Post. The footprint of the Phase 3 greenhouse can be seen in the foreground, along with the new rainwater harvesting basin (photo courtesy of Andrew Horowitz, Little Leaf Farms) – September 2019

7 Jackson Road – Bio-Techne Expansion: Bio-Techne had a 26,058 SF addition to the existing 40,872 SF bio-medical device manufacturing and support facility approved by the Commission in September and has begun construction of the expansion area. The developer had planned for this expansion when he first acquired the property and by utilizing our reserve parking provisions of the DEC’s Rules and Regulations and pre-planning for the small amount of additional pavement required for the expansion, the site was used efficiently while retaining the potential for future expansion. The addition includes 2 new loading docks (for a total of 6) and the relocation of the existing recycling and waste management area.



Rear of Bio-Techne site – excavation commenced for new addition – October 2019

84 Antietam Street - Clear Path for Veterans New England: (formerly Eglomise Designs) was sold to Clear Path for Veterans New England. Staff was consulted regarding compliance with MHC requirements and MHC approval was received for a number of exterior modifications that came before the Commission in the Spring of 2019 for site plan approval under the Unified Permit process. Improvements included reduction in pavement and other low-impact stormwater management techniques, new handicapped access, an exterior dog training fenced in area, landscaping and redesign of the parking area.



Elevation drawing of new proposed main entrance to Clear Path for Veterans on the east side of 84 Antietam Street.

The preservation, rehabilitation and adaptive reuse of this historic structure will preserve a cultural and historic part of former Fort Devens.

64 Jackson Road - Quiet Logistics loading dock expansion: Devens By-Laws require a Level 2 Unified Permit for the addition of loading docks at a facility. Because of ledge in the area the addition of the loading dock necessitated new stormwater management facilities be evaluated and installed. Quiet Logistics has chosen to locate its Research and Development arm, its corporate headquarters, customer services operation and additional fulfillment services including 350,000sf of interior racking within the building.

Shirley Meadows Senior Housing: The Women’s Institute received its Low Income Housing Tax Credits and began construction on this 58 unit deeply affordable senior residential housing development at 27 Hospital Road in the Shirley Village Growth District at the corner of Hospital Road and Elliot Road. Although this project was approved back in 2017, funding delayed the project until now. After discovering a discrepancy in the building height in 2019, prior to construction, the Women’s Institute was granted a height variance by the Commission. This variance was necessary to allow for a more steeply sloping roof and to harmonize the facility with the surrounding architecture.



Shirley Meadows under construction – January 2020



Artist’s rendering of Shirley Meadows

Construction continued at a rapid pace through 2019 and a topping off ceremony was held in December. The project is expected to be ready for occupancy in the summer of 2020. This senior rental housing project will be restricted to individuals 62 years or older with incomes ranging from 60% Area Median Income (AMI) to 30% AMI and below.

New England Studios: The studios continued to remain at full capacity throughout 2019 with streaming television series that are being filmed in their sound stages as well as in the surrounding region. Hulu’s “Castle Rock” was back in Devens filming their second season. Netflix series such as “The Society” and Apple TV series by Paramount Studios called “Defending Jacob” were also filmed at the studios. A number of feature length films were also shot here such as Daddy’s Home 2, Little Women, Slender Man and Central Intelligence. The DEC coordinated with Devens Public Works, administering and issuing a large number of off-site filming permits for locations in Devens through 2019. These permits (issued in accordance with the Devens Filming Permit Guidelines) help ensure filming activities have the least impact on residents and businesses. Filming locations have included Mirror Lake, former Grant Road Housing, Salerno Circle, Robbins Pond, MacPherson Road and Antietam Street. Filming has also been happening outside of Devens in towns like Harvard, Ayer, Shirley, Groton, Clinton, Lancaster, Acton, Hudson, Concord and Orange, to

socially interactive community. Grant Road between Pine Street and West Main Street remained closed through 2019 while the developer cleared the land and began work on the new underground utility services. Building permits for the two – 20 unit multi-family apartment buildings were issued in 2019 and construction is expected to begin in the spring of 2020.

Additional Project Highlights from 2019:

Other projects that were permitted and completed in 2019 included:

- Nypro added 32,000sf of clean room production capacity at its 112 Barnum Road location.
- Johnson Matthey built out additional lab space at its campus located at 25 Patton Road.
- Manilows Canine Playground (doggie daycare facility) moved into 249 Barnum Road.
- Applewild School at 27 Jackson Road expanded kindergarten programming and classrooms and added a new outdoor play area to accommodate first grade classes for the 2019-20 school year.
- McInnis Cement continued to operate an interim dry cement distribution facility on Devens at 78 Barnum Road until they are ready to begin construction on their Portland cement (ASTM C150) dry storage and distribution terminal (permitted in 2018) to be located at 35 Saratoga Boulevard.

2019 Permitting Summary:

Permit Type	#issued in 2019	# issued in 2018	Difference
Level 2 Permits	7	8	-1
Reconsideration	1	0	+1
Level 1 Permits	83	47	+36
Wetland Request for Determination of Applicability	1	0	+1
Wetland Notice of Intent (Order of Conditions)	0	1	-1
Wetland Certificates of Compliance	0	0	=
Sign Permits	2	7	-5
Tent/Event Permits	18	19	-1
Demolition Permits	2	0	+2
Level 1 Lotting Plans	1	3	-2
Septage Hauling Permits	13	10	+3
Certificates of Occupancy	18(3TCOs)	37 (5TCOs)	-19
Electrical Permits	95	60	+35
Plumbing Permits	93	19	+74
Gas Permits	17	8	+9
Sheet Metal Permits (new in 2011)	10	6	+4
Victualler’s License	11	11	=
Flammables License	6	6	=
Liquor Permits	5	5	=
Pledge of Liquor License/Transfer of License	1	1	=
1 Day Liquor Licenses	3	3	=
Violation Notices	5	2	+3
Schools – Certificates of Inspection	4	4	=
Filming Permit	24	4	+22
TOTAL:	420	261	+159

2019 saw a steep (+178) increase in permits issued, mostly associated with the buildout of previously approved projects such as Shirley Meadows, Emerson Green, and the fit out of labs/clean rooms at various facilities. 2019 also saw an increase in Reconsiderations, level one permits, Wetlands Request for Determinations, demolition permits, sign permits, level one lotting plans, gas, plumbing, electric and sheet metal permits, notices of violation, and film permits. There were decreases in Wetlands Orders of Conditions and tent permits. The Commission's record of average time to permit was slowed to 60 days (still well below the statutory 75 day limit); due in large part to one applicant's continued extension requests. If this project is removed from the equation, the Commission averages 54 days to approve a project under its stream-lined permitting (which is our average time to permit).

Throughout 2019, the DEC permitted a number of special events such as the 7th annual MS Muck Fest, a multiple sclerosis fundraising event that includes a 5KM on and off road race course with approximately 20 obstacles along the way that include climbing walls, cargo nets, pools and swings, among others. This event attracted over 5,000 people. Additional special events included the Dogs2Vets event and Journey Home road race - two fund raising events that were put on by Clear Path for Veterans New England which began operating out of 84 Antietam Street. All permitted events were well managed and went off without any problems.

Enforcement:

2019 saw few violations of the Devens Bylaws and Rules and Regulations. Over the past year, the DEC worked to successfully resolve a number of violations of the Devens Industrial Performance Standards. The DEC issued fines and citations to one business for violation of their Unified Permit conditions, including the MA anti-idling (truck idling noise complaints) and light pollution. Since the enforcement and citations, there have been no additional complaints and the violator appears to be controlling their lighting system properly and utilizing the auxiliary power units that were installed at their facility to eliminate the need for trucks idling while at the loading docks. This has helped reduce noise as well as harmful air emissions.

The DEC continued to receive complaints of trucks cutting through the Auman-Bates residential area to access the Devens Industrial Park. Although the truck traffic had significantly decreased, complaints shifted to the volume of cars cutting through this area to access businesses in the industrial park. To address these complaints, MassDevelopment had implemented a number of turning restrictions and additional signage, based on a 2018 traffic study/count conducted by Howard Stein Hudson Engineering. Monitoring and enforcement of the designated truck route and these new turning restrictions continued throughout 2019. A follow-up study in the late summer of 2019 showed that these measures have proved to be extremely effective, reducing car and truck cut-through traffic along Buena Vista Street and directing traffic to use Saratoga Boulevard instead. Designated truck route reminder notices were still sent out to the few businesses and trucking companies found violating the "No Trucks" signage on Buena Vista Street and the state police continue to periodically monitor this area and have been issuing traffic citations to cars and trucks that are found disobeying the posted signage and turning restrictions.

DEC Staff dealt with a number of businesses that erected un-permitted signs and advertisements that do not comply with the Devens Sign Control Rules and Regulations (974 CMR 6.00). Most were temporary banners and signs placed within the road-right-of way creating a public safety concern (drivers reading signs and not paying attention to the road), as well as unsightly roadside conditions. Devens Public Works takes great care to maintain the streets and rights-of-ways in Devens and the DEC continued to assist with removal of these signs to help keep Devens safe and reduce "clutter" along roadways.

DEC Staff, with the assistance of MassDevelopment Engineering, continued to collect Annual Stormwater Reporting forms from all businesses throughout 2019. Water use restrictions were enacted throughout the summer in Devens, in accordance with the Devens Water Management Act permit requirements and 974 CMR 8.09 and no violations of the outdoor water use restrictions were reported.

Mediation continued throughout 2019 on the Clean Water Act suit filed by the Conservation Law Foundation against MassDevelopment and DEC regarding allegations of stormwater discharge violations, which DEC continues to dispute. The DEC, through its legal counsel and special outside environmental counsel, is working with MassDevelopment and hopes to resolve this matter in early 2020.

Public Health and Safety:

The DEC, acting in its capacity as the Board of Health for the Devens Regional Enterprise Zone, worked on a number of public-health-related initiatives throughout 2019, including a residential hoarding case which involved a fire and the need to condemn the house until repairs are made. DEC's legal team, Metrowest Collaborative housing, Nashoba Valley Boards of Health, Visiting Nurses and others were involved in counseling the hoarder and family members dealing with this difficult situation. By the end of 2019, the property was cleaned up and is currently being renovated to resolve all health code violations.

In response to the Environmental Protection Agency and MA DEP's 2018 Health Advisory alert regarding per and poly fluorinated compounds (PFAS) in drinking water, in 2019 the DEC permitted and Devens Utilities completed

the installation of additional water treatment facilities at the MacPherson and Shabokin drinking water wells in Devens to remove low levels of PFAS found in groundwater. The treatment consists of filtration using Granular Activated Carbon (GAC), a common filter media used throughout the United States and Europe. New GAC filters at both Shabokin and MacPherson Wells were installed. Testing and verification was completed and



Shabokin Well Granular Activated Carbon Filters and Frac Tanks – September 2019

these water treatment facilities are now delivering water with non-detectable levels of PFAS. Devens discontinued its voluntary bottled water service to residents as a result. Devens utilities continues to test and explore treatment options and other actions that may be necessary to ensure the ongoing health and safety of Devens drinking water.

In May, 2019 the DEC joined with the Fort Devens Museum board and representatives of the Massachusetts Department of Public Health to dedicate the Spanish Influenza Memorial near the flag pole on Rogers Field. Devens was the location where the Army Medical Corps came together to develop a strategy to respond to the deadly flu outbreak which killed more people than died in WWI. The DEC was able to combine its roles as Historic District Commission and local Board of Health to inform the public of the need for vaccinations and the important lessons history provides for not doing so.



Spanish Influenza Memorial Dedication (from left to right: Dr. Sandra Smole, Dr. Marcia Synnott, Jessica Strunkin, Col. Slaughter, and David King - May 2019)

With climate change and global warming trends creating warmer conditions, ticks, West Nile Virus and Eastern Equine Encephalitis threats have been increasing in Massachusetts for much of the spring and summer. Working with MassDevelopment, the Nashoba Associated Boards of Health, and the State Department of Public Health, the DEC published numerous health alerts to raise awareness and provide the general public with tips and resources for protecting themselves and their loved ones from these serious viruses. The DEC also partnered with the Nashoba Associated Boards of Health to provide access to flu clinics for all Devens residents and employees of Devens businesses.

Transportation:

The DEC and MassDevelopment continued to partner with Montachusett Area Regional Transit (MART), Devens businesses and the Towns of Ayer and Shirley to operate shuttle service in the Devens region. This fixed route regional shuttle provides access to and from Devens, downtown Ayer, Nashoba Valley Medical Center, Ayer MBTA train station, Shirley Municipal Center and Shirley MBTA train station. This service also connects Devens to the communities of Fitchburg and Leominster - where surveys of Devens industries told us a large portion of their employees reside. In addition, this service provides residents of Devens, Shirley and Ayer the opportunity to connect to the Whitney Field and Orchard Hill Malls and the entire Montachusett Area Transit Authority bus system. Ridership fluctuated throughout 2019 between 80 and 120 riders per week. This shuttle service, coupled with the improvements to the MBTA Fitchburg Line commuter rail, makes a reverse transit commute from Boston to Devens possible – filling a huge gap in our sustainability picture for Devens. The full schedule can be found on-line at: http://www.devensec.com/news/Devens_Schedule.pdf. WGBH included a feature on the Devens Shuttle in a radio piece on first mile/last mile transportation needs.

The DEC and MART worked with the business community to control shuttle costs by regularly evaluating route viability. This resulted in replacing weekend fixed routes with on-demand call in service and a resultant reduction in program costs. Program evaluation continues on an irregular basis in an effort to increase the efficacy of this important first mile/last mile shuttle service. Regular education of our employers about the program and how to increase ridership remains an important component of our communication efforts.

Mr. Lowitt continues to chair the Fitchburg Line Working Group which celebrated the opening of the Ayer Rail Trail Parking Garage with our colleagues and legislative supporters in December. Our efforts along the Fitchburg Line have become the model for the Communities Connected by Rail Coalition of cities and towns serviced by commuter rail service. The coalition recognizes that all of its members share common issues and concerns and have organized to advocate for them. Mr. Lowitt attends these meetings on a regular basis.

Advancing Complete Streets: In the spring Devens Department of Public Works and Devens Engineering re-striped the travel lanes on Barnum Road. The lanes were narrowed in some areas from 12-15 feet, down to 11 feet in both directions. This contributes to slowing vehicles down and it freed up enough shoulder space to install dedicated bike lanes along the entire length of Barnum Road (2.1 miles). This almost doubles the amount of dedicated bike lanes in Devens and brings our total linear miles of roadways with dedicated bike lanes up to 5 miles (10 miles if you count both sides of the road round trip!). This work furthers our complete streets goals and provides a safe alternative transportation mode for Devens residents, businesses and visitors, helping to reduce car trips and further the sustainable redevelopment goals of the Devens Reuse Plan. Devens Complete Streets plan can be found at: <http://bit.ly/DevensCSP>. This plan was accepted by MassDOT, making Devens eligible for additional state funding to construct priority projects within the plan.



Jackson Road Complete Street Upgrades

A main goal of the Devens Reuse Plan has been to re-connect Devens with the surrounding communities, and throughout 2019, Devens worked collaboratively with the Town of Ayer to explore the possibility of a joint complete streets project that would help facilitate better connections between West Main Street in Ayer, Front Street in Shirley, and Jackson Road/Verbeck Gate in Devens. A MassWorks funding grant application was filed and while it did not receive funding in the 2019 funding round, we will try again in 2020.

Open Space and Recreation:

As of 2019, the total amount of land in Devens that has been permanently protected is over 1,400 acres. The key focus of the 2008-2013 Devens Reuse Plan and Open Space and Recreation Plan was the permanent protection of more than 33% (1,446 acres) of land in Devens. Throughout 2019, MassDevelopment and the DEC continued to work on protecting the remaining additional lands identified for protection along Cold Spring Brook, Willow Brook and Grove Pond. DEC Staff continued to work with MassDevelopment and the MA Executive Office of Energy and Environmental Affairs to finalize Draft Conservation Restrictions for the Grove Pond and Willow Brook parcels that were identified for permanent protection in the 2008-2013 Devens Open Space and Recreation Plan.



The DEC remained an active participant and supporter of the Nashua River Wild and Scenic River Study Committee throughout 2019. The Study Committee was charged with identifying river-related outstandingly remarkable resource values, evaluating the eligibility and suitability of the rivers for federal designation as a Wild and Scenic River, and developing a voluntary stewardship plan which the DEC helped author. In 2019 the President of the United States signed into law a bill adding segments of the Nashua, Squannacook, and Nissitissit Rivers to the National Wild and Scenic Rivers System; officially designating the rivers as Partnership Wild and Scenic Rivers. The full report and details of the study and committee activities is available at:

<https://www.wildandscenicnashuarivers.org/>. In April, the Study committee hosted a Wild and Scenic official designation celebration at the Oxbow National Wildlife Refuge Bill Ashe Visitor Facility in Devens. Numerous local and state officials attended and offered congratulations to all those involved for this great accomplishment. There is a nice short 5 minute video highlighting the beauty of the Nashua River and the Wild and Scenic River Designation Process: <http://bit.ly/NashuaWSR> .



The daylighting of a 400' section of Willow Brook that was permitted by the DEC in 2015 and completed in 2016, had it's final year of required monitoring in 2019. This project removed the existing culverted section of Willow Brook and re-created an open surface channel for the brook to flow (daylighting). The reconstructed channel, riparian habitat, and floodplain have successfully re-established – evident by the teeming wildlife (hawks, fox, deer, frogs, minnows, and more!) that have been seen using this corridor.



Willow Brook daylighted stream habitat -2019.

Phase 1 of the Grant Road (Emerson Green) housing project required the developer to transfer just over 4 acres of land surrounding the phase 1 development to the DEC for permanent open space protection. These open spaces will be set aside for natural habitat and passive recreation uses (including the potential for community gardens) for the benefit of the general public. Future phases of this project will include a central active park space with a playground, trails and lawn areas for active and passive recreation.

Devens Sustainability Initiatives:

Devens Eco-Efficiency Center: In 2019, the DEC continued to implement and fund a number of sustainable development programs and policies in an effort to further advance the sustainable development goal within the Devens Reuse Plan. The Devens Eco-Efficiency Center, led by Executive Director Dona Neely, hosted a number of waste reduction and educational programs that helped establishments make more efficient use of resources and improve the sustainability of their operations. The Devens Enterprise Commission provides funding for this award-winning non-profit to support its activities that facilitate sustainable business practices in the community. Since its launch in 2008, the Center has continuously strengthened the value of its services and grown engagement of area institutions. In 2019, the organization's activities benefited 234 commercial and industrial firms, municipal departments, non-profits, organizations, and schools, an increase of 30% over 2018.

In 2019 alone, the Devens Eco-Efficiency Center's The Great Exchange prevented the waste of over 30 tons of unneeded resources worth more than \$250,000. Materials were gained from 16 businesses in the region that were closing their facility, firms that changed operational practices, and from others that recognized the reuse potential of their "waste."

The Center partnered with Reliant Medical Group and preserved the value of 19 tons of items left behind after the relocation of 11 offices. The Center increased the number of exchange events from four to 22. This improved accessibility enabled an increase in participation from 163



Teachers from Parker Charter School had a productive visit to The Great Exchange!

small businesses and not-for-profits in 2018 to 212 entities in 2019. Those that visited The Great Exchange program's two locations in Devens achieved savings on arts and crafts items, classroom resources, janitorial, kitchen, office and shipping supplies, office furniture and fixtures, shelving units, and much more. Senator Jamie Eldridge and Representative Jen Benson also visited the Devens Eco-Efficiency Center in 2019 to learn about The Great Exchange and how it benefits the region.

In addition to the Great Exchange, in 2019 the Center hosted ten (10) Environmental Health and Safety (EHS) Roundtable educational forums for professionals who have environmental, health, and/or safety related responsibilities. Industry experts led presentations and discussions that addressed Doing Safety Differently, Hearing Conservation, Mass. Department of Environmental Protection's Priorities, Tracking Leading Indicators, and more. Special trainings included Active Shooter Response, Fire Extinguisher Use, and Stop the Bleed Strategies. The forums attracted employees of 34 businesses - over half of which were based in Devens.

More information on how the Devens Eco-Efficiency Center contributes to the sustainable redevelopment of Devens and helps entities achieve

environmental, social and economic benefits can be found at www.tinyurl.com/DevensEEC and www.facebook.com/TheGreatExchangeDevens.



Staff brings in new inventory for The Great Exchange.



EHS Roundtable attendees learn strategies to control wound bleeds

STAR and LEED for Cities and Communities: In 2018, after over a year of tracking and reporting, on sustainability initiatives, Devens was awarded a 4-STAR Community Rating – the 70th STAR Certified Community in the United States and one of only 26 communities that have achieved 4-STAR Certification. The STAR Community Rating System is the nation’s leading framework and certification program for evaluating local sustainability, encompassing social, economic and environmental performance measures. STAR helps communities evaluate their strengths and weaknesses across seven areas: the built environment; climate and energy; economy and jobs; education, arts and community; health and safety; and natural systems. STAR provides a third-party verification process to ensure accountability. The full report outlining the scoring for Devens is available on-line at: <https://bit.ly/2G6Cj5O>. During 2019 the U.S. Green Building Council (USGBC) integrated the STAR Community Rating System into USGBC’s new LEED for Cities and Communities programs. Subsequently, the USGBC



recognized Devens as a LEED certified Community. Devens was even featured in an article in the March 2019 edition of PLANNING magazine that highlighted STAR’s merger with the U.S. Green Building Council’s (USGBC) LEED for Cities and Communities rating system. Devens is excited to continue to lead by example in Massachusetts by using the USGBC’s LEED for Cities and LEED for Communities rating system to further implement, monitor, track and prioritize actions that will further the sustainable redevelopment goals of the Devens Reuse Plan and make Devens an even better place to live, work, learn and play! The Devens Reuse Plan called for the redevelopment of the former Fort Devens to become a model of sustainable redevelopment. A 4-STAR Community rating and LEED for Cities and Communities designation provides third-party verification that MassDevelopment, the Devens Eco-Efficiency Center, and the Devens Enterprise Commission are continuing to achieve the sustainable redevelopment goals established by our host communities of Ayer, Harvard, and Shirley along with the Legislature.



Devens, Massachusetts, which received its STAR community rating in December 2017, is already signed up to be a beta city for the new LEED for Cities and Communities program.

LEED-STAR Launch Sustainability Beta

CITIES ACROSS THE WORLD now have a new community-wide framework that applies Leadership in Energy and Environmental Design standards to future development.

Last June, STAR Communities—a well-known environmental building assessment rating system—merged with the U.S. Green Building Council to develop a new program that aims to help cities assess sustainability on a broad scale by adding standards for social justice, emissions reductions, transportation infrastructure, and more. That new program, LEED for Cities and Communities, is now open for beta registration.

Beyond buildings

Developed by the USGBC, LEED has been the gold standard in sustainable building since its launch in 2000. With the help of STAR Communities, USGBC will expand LEED beyond buildings into a rating system that assesses large-scale sustainability policies’ effectiveness in cutting emissions and improving residents’ lives.

“LEED was designed to be more about performance and STAR for planning. Our new system can include both,” Roger Platt, senior vice president for the USGBC.

The program functions as a scorecard for a city’s overall performance in every aspect of sustainability. Eight categories—including transportation, natural resource management, energy, and water

efficiency—are scored, for an overall total of 110 “points.”

The scorecard also includes a quality-of-life component that will assess emergency response, environmental justice, equitable development, poverty alleviation, and other social justice concerns. When STAR proposed partnering, LEED was thrilled, Platt says—LEED staff learned a great deal from the STAR rating system that has been integrated into the new program, including STAR’s social justice assessment, which helps get past surface-level statistics like college graduation rates that can disguise inequality.

Holding cities accountable

The new program will include elements

of accountability to ensure stakeholders are taking the actions they promise. Those plans could include transportation infrastructure, conservation, or poverty alleviation (LEED’s program Arc currently serves as an accountability tool and will be integrated into the new program).

Community-level certification will also allow for types of regenerative and climate-adaptive design that individual building certification cannot. It is much more effective for cities to plan for eventualities like sea-level rise than individual developers, for example.

Neil Angus, AICP, CER, an environmental planner in Devens, Massachusetts, thinks the merger represents great opportunities for sustainable design. Registering to be assessed under the new rating system gives cities a chance to be independently verified and receive feedback that can improve their climate and sustainability initiatives.

“You can’t manage what you don’t measure,” Angus says.

Devens, a former military base that was declared a U.S. Environmental Protection Agency superfund site in the early 1990s, was recently STAR certified. Sustainability is a key goal for community leaders, and the STAR rating helped them assess their plans. Devens is already set to be a beta city for the rating system, Angus says.

“The STAR integration into LEED incorporates the best elements of the STAR Certification program and will allow the new rating system to reach out to a broader audience,” he says.

Because the program is international, it will raise the profile of communities prioritizing environmental protection and climate adaptation and connect leaders in sustainability worldwide. The program will serve as a universal language for environmental assessment that can be applied even to vastly different cities. ■

—Casey O’Brien
O’Brien is a freelance writer and journalist in the San Francisco Bay Area. She can be found on Twitter @caseyinkstained.

News and Legal Lessons are edited by Mary Hammon, an associate editor of Planning. Please send information to mhammon@planning.org.

Greenhouse Gas (GHG) Inventory: Building off our 4-STAR Community Sustainability Rating achievement and the DEC’s 2018 Municipal Vulnerability Preparedness Plan, in 2019 the DEC, in partnership with MassDevelopment, undertook a GHG Inventory that measured the 2015 baseline emissions community-wide, as well as from our municipal operations. Findings from the inventory indicate that most of Devens’ GHG emissions are a result of industrial and institutional buildings’ electricity and natural gas usage. Emissions from buildings accounted for 94% of all GHG emissions in Devens. Transportation was the second highest sector, representing only 5%. Water delivery, wastewater treatment, and solid waste disposal accounted for slightly more than 1% of total emissions in Devens.

Devens Community GHG Emissions by Sector

Sector	2015 (MTCO ₂ e)	% of Total 2015
Buildings	90,570	94%
Transportation	4,339	5%
Wastewater	722	1%
Waste	223	<1%
Water Treatment & Delivery	200	<1%
Total	96,054	100%

In terms of emissions sources, electricity (48.9%), natural gas usage (45.5%), and fugitive gas (0.7%) combined represent more than 95% of Devens GHG emissions. Emissions from gasoline (2.8%) and diesel (1.7%) combine for 4.5% of emissions. The municipal GHG inventory accounts for emissions by sector, source, and department. The largest sector was Facilities and Infrastructure representing 47.7% of emissions. Wastewater Treatment was the second highest emissions sector with 27.5% of emissions. Electricity was the largest source of municipal emissions (58%), followed by natural gas usage (23%). In terms of departments, Wastewater Treatment was the largest emitter at 28% of municipal emissions, followed by Public Works (19%) and Administrative (17%).

Devens Municipal GHG Emissions by Sector

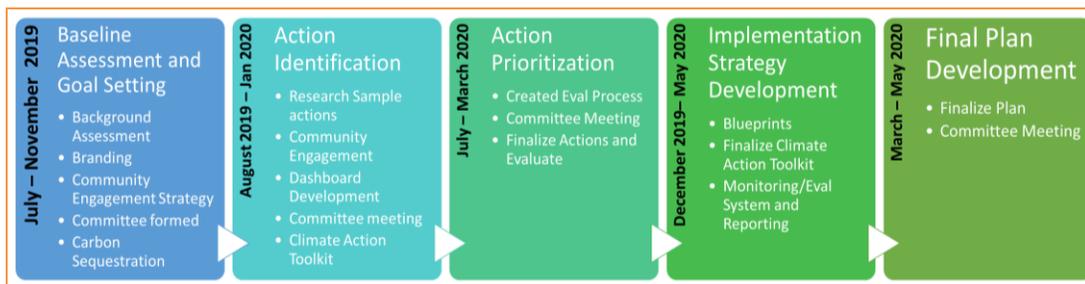
Sector	2015 MTCO ₂ e
Facilities and Infrastructure	1,272
Wastewater Treatment	734
Vehicle Fleet	222
Water	200
Employee Commute	119
Streetlights and Traffic Signals	115
Solid Waste	5
Total	2,667

Devens municipal operations are demonstrating significant GHG emission reductions through its renewable energy portfolio. Highlighting these types of achievements is critical to further demonstrating our commitment to the Reuse Plan and the clean, orderly and sustainable redevelopment of Devens. Tracking our GHG emissions will also benefit existing and future businesses in Devens by providing data that can help businesses achieve their own corporate sustainability objectives.

This inventory was critical to understanding current conditions and was the first step toward developing a realistic Climate Action Plan which will set emissions reduction targets, and include strategies to achieve targets and track progress over time. The full report is available on-line at:

<http://www.devensec.com/sustain.html>

Climate Action and Resilience Plan: In early 2019, Devens received a \$142,000 action grant from the State Executive Office of Energy and Environmental Affairs through its’ MVP program to develop a climate action and resiliency plan. The purpose of this plan is to provide a roadmap to achieving further reduced greenhouse gas emissions in the Devens region. The plan further builds off of the Devens Municipal Vulnerability Preparedness Plan and the highest priority resilience actions that came out of that process. The Devens Climate Action and Resilience Planning Process includes five (5) main steps:



The DEC hired Kim Lundgren Associates to assist in developing this plan. We branded the Climate Action Plan and process as “*Devens Forward: Embracing the Past, Transforming the Future*”. This captured the forward-thinking nature of this process, recognizing Devens history, but highlighting our sustainable redevelopment efforts in line with the Devens Reuse Plan. A Climate Action Stakeholder Group consisting of local and regional officials, businesses, residents, local non-profit organizations, and institutions was developed to help inform and shape the plan. We held numerous public engagement sessions and interviews with key stakeholders (businesses, non-profits, political leaders, residents and institutions) to discuss community priorities and concerns. By the end of 2019, our community engagement process was in full swing. We launched a community survey, connected to people on social media, and began to identify and prioritize solutions for actions.



DEVENS FORWARD
Embracing the Past, Transforming the Future

THE PLAN

DEVENS FORWARD WILL CONSIDER STRENGTHS AND OPPORTUNITIES IN SEVEN AREAS:



CLIMATE & ENERGY How we take action to minimize our contribution to climate change by:

- Reducing the sources of greenhouse gas emissions by switching to renewable energy for our homes, businesses, and vehicles
- Promoting efficiency programs that reduce overall energy use and costs



PUBLIC HEALTH & SAFETY How we enhance the community's:

- Overall health and well-being
- Access to resources and support before and after extreme events or disasters
- Resilience to the impacts of natural hazards



NATURAL RESOURCES How we preserve and enhance our:

- Parks, forests, rivers, streams, wetlands and natural habitats
- Air quality
- Street trees
- Drinking water



INFRASTRUCTURE How we:

- Build and maintain our buildings, roads, water and wastewater systems, stormwater piping and drainage systems
- Reduce, reuse, recycle and dispose of material



ECONOMIC DEVELOPMENT How we offer the region:

- Quality jobs, workforce development, and educational opportunities for all
- A diverse economy that supports emerging industries, such as the creative enterprises, tourism, technology, and manufacturing.
- A showcase of sustainable business practices



HOUSING How we:

- Provide a diverse range of accessible and affordable housing options
- Ensure all our residences are built and maintained to have a minimal impact on the environment



TRANSPORTATION & LAND USE Includes how we are ensuring resilient community assets through:

- Our network of roads, trails, greenways, bike paths, bus routes and sidewalks that help us get around
- The guidance and policies for how we develop and redevelop our land



This plan is being developed to serve as a model and will include resources that other communities can use to guide development, while reducing emissions and addressing climate change, and improving overall air quality as well as the health and safety of their populations at the same time. This process will also benefit existing and future businesses in Devens by providing them with additional data to help them achieve their own corporate sustainability objectives.

Third-party certification from two of the world's most notable sustainability rating systems (STAR Communities and LEED for Cities and Communities) demonstrates that Devens is living up to the sustainable redevelopment goals of the Devens Reuse Plan. This Climate Action Plan will keep Devens leading by example and serve as a model to assist the region and the state in meeting the goals of the Global Warming Solutions Act by comprehensively addressing climate change on a local and regional level.

Devens Farmers Market: Access to affordable and healthy foods is an important part of creating a sustainable community. This issue has come up in a number of Devens studies, including the 2017 Urban Land Institute Technical Assistance Panel, the STAR Community Rating System, and the Devens Healthy Communities Proclamation. The opening of the Natural Café in the Dragonfly Wellness Center at the corner of Barnum and Jackson Road has helped tremendously but in order to provide even more opportunity to reach a broader population at Devens, in October and November 2019, the DEC partnered with MassDevelopment and Dick’s Market Garden in Lunenburg to host two pilot Farmers Markets.



Devens first Farmers Market on the Devens Common – October 2019.

We invited other local food vendors, as well as surrounding town Farmer’s Market organizers in an effort to bring together Devens residents, employees and visitors, while supporting and raising awareness of the regional agricultural community and the locally grown movement in and surrounding Devens. Devens Grill, Loaves and Fishes, Little Leaf Farm, Natural Café, and Dragonfly Wellness all participated in the first market. Dick’s Market Garden donated almost 700 pounds of left over fresh produce to Loaves and Fishes Food Pantry in Devens as part of these two markets. Both pilot markets were a success and we expect to roll out a full schedule for additional markets throughout 2020: <https://www.dicksmarketgardens.com/> .

Devens Street Tree Replacement Program: The DEC and MassDevelopment Devens Public Works continued to partner to maintain and increase tree canopy cover in Devens through the street tree replacement program. Recognizing the social, economic, and environmental benefits that street trees provide, as street trees are damaged or die, Devens DPW has been replacing trees with a variety of canopy trees that are able to withstand urbanized conditions (poor soils, salt and snow from roadways). Since 2017, the DEC has set aside a yearly budget line item to assist in the funding of this program as it is crucial to the sustainable redevelopment goal for Devens (and they add to the beauty and character of Devens!). The installation of these trees is also consistent with the Devens Complete Streets Policy in that these trees will eventually provide canopies that will create a sense of enclosure and help to naturally slow vehicles down. The trees also provide shade and make the walking and biking experience along the sidewalks and bike lanes more pleasant. The trees help absorb stormwater runoff (additional green infrastructure) and extend pavement life by providing shade and reducing heat island impacts. In 2018, Devens Public Works Department began formalizing a street tree inventory in order to better manage this program and identify gaps in existing street tree canopy cover. This work will continue throughout 2019 and beyond. The DEC continues to help educate businesses and residents about the triple bottom-line impacts of street trees in Devens and created an informational brochure that is posted on the DEC website: <https://bit.ly/2WnvmTL> .



Street trees lining the Historic Auman Street in Devens

Biometrics of Design: Building off the success of the initial research project where the DEC partnered with Tufts University Department of Urban and Environmental Policy and Planning on a Biometric Pilot-Study to Better Understand the 'Unconscious' Human Experience of the built environment at Devens, Phase 2 of this study was completed in 2019. The study involved a comparison of the innovative form of residential development on Grant Road to that of a traditional suburban sprawl-type subdivision development. This comparison was undertaken to help understand how certain forms of development can impact our unconscious mood and behavior, and ultimately impact our mental health and well-being. The study revealed that conventional subdivisions with wide roads and houses set far back from the street are uninviting and give people little visual/cognitive stimulation, while new urbanist designs like Emerson Green create edge conditions that provide “fixation” points and cognitive stimulation for pedestrians that reduces uncertainty and enables people to walk through a neighborhood more effortlessly:



Above: New urbanist street design: edge conditions capture more attention vs. traditional street design (below).



The Devens Phase II study indicates that the layout of conventional subdivisions are designed from the driver’s perspective to provide an uninterrupted view of the road straight-ahead. The layout of houses far from the street, makes it easy on the driver, but difficult for the pedestrian walking in the neighborhood to fixate on or even find any buildings pre-attentively. This makes walking onerous, and lessens the likelihood that people will even think of doing so. The straightforward visual sequencing we find in the new urbanist streetscape quickly soothes our fear-based brain and provides the visual stimulation that makes people feel more comfortable. The results of this study help us measure and evaluate walkability and the pedestrian experience as an indicator of healthy place making and designing places for people first. The full report is available on-line at: <http://bit.ly/DECbiometric2>

DEC Operations:

In 2019 the DEC and Devens Eco-Efficiency Center staff continued implementing voluntary initiatives to green our own office environment, including reducing vehicle miles traveled through telecommuting, and continued use of an electric assist bicycle and personal hybrid and electric cars for site inspections and local DEC business. Additional office sustainability initiatives include composting, recycling, and continued reduction in energy and paper usage through various efficiency measures. In 2019, these initiatives resulted in significant triple-bottom line savings (see chart on next page).

Year	Reduced Gas VMT	Energy savings	Waste diverted from landfill	CO2 equiv. reductions	\$ Savings
2015	8,214 miles	1918 kWh	933 lbs.	8.195 tons	\$1,659
2016	11,588 miles	3496 kWh	458 lbs.	9.193 tons	\$1,798
2017	11,698 miles	3364 kWh	460 lbs.	9.293 tons	\$1,809
2018	20,047 miles	3364 kWh	458 lbs.	11.793 tons	\$2,803
2019	24,161 miles	3364 kWh	458 lbs.	13.193 tons	\$2,959

While energy and waste diversion numbers remain similar to 2017 and 2018, the DEC and Devens Eco-Efficiency Center employees continued to reduce vehicle miles travelled (VMT) through initiatives such as telecommuting, carpooling, biking, driving electric vehicles, and taking transit to work. The average price per gallon of gas dropped from \$2.90 in 2018, to \$2.60 in 2019 but even so, the increase in the reduction of VMT not only increased our carbon reductions, it also resulted in slightly higher cost savings over 2018. The DEC continues to require full digital copies of all Unified Permit submissions and we distribute correspondence to Commissioners electronically to further reduce copying costs and paper usage. The DEC continued to scan all existing paper files in an effort to streamline efficiency, reduce paper usage, and maximize office space. This is not only saving the DEC in operational, storage and processing costs, but it is also saving Applicants time and money by reducing the amount of paper copies of applications, plans and supporting materials they need to provide. The DEC will continue to track its progress in 2020 and look for additional ways to further reduce impacts, while still providing the highest level of quality service.

Five Year Review Update:

The Devens By-Laws (Article V.A.) and Chapter 498 require the DEC to conduct progress reviews of the status of Devens redevelopment every five years. These include an analysis of District by District development over the past five years and comparing actual development with the goals set forth in the Reuse Plan and By-Laws. The latest report (2011-2015) can be found at <https://bit.ly/2Scfwfr>. As part of this review, the DEC identified a number of areas that it would focus on throughout 2016-2020 to ensure its actions and decisions continue to further the goals and objectives of Chapter 498 and the Reuse Plan. The following chart provides a status update on those efforts as of December 2019.

Five Year Review: Status Update - 2019

Area of Focus	Status
Working with existing and new Homeowners and Condo Associations to streamline residential permitting consistent with new Residential Regulations as well as Historic District requirements.	Accomplished/Ongoing. <ul style="list-style-type: none"> • Additional guidance documents updated on-line (Devens Residents page) providing residents more direction for permitting processes. • MassDevelopment and DEC historic consultant in 2018 to address historic window replacements on Bates Street. We supported their application to the Massachusetts Historic Commission in 2019. • New window type approved for Historic District. • Working closely with the developer and new residents of Grant Road to iron out residential permitting issues before they surface.
Sustainable Indicators Report – measurement and verification of sustainable development.	Ongoing. <ul style="list-style-type: none"> • Continued updates to Indicator’s Report. The DEC utilized the STAR Community Indicators program to provide a second means of benchmarking our sustainable development efforts. 2017 Report: https://reporting.starcommunities.org/indicators/community/172-massachusetts-devens. • Integrating the STAR Community Rating system indicators with those in our past indicators report and hope to have a completed report in 2020.
Continued support and growth of the Devens Eco-Efficiency Center (DEEC) as a strategy for sustainable redevelopment and a value-added feature for business and industry locating at Devens.	Ongoing. <ul style="list-style-type: none"> • DEC continues to support the DEEC (majority of DEC Commissioners and staff make up the Board). • Annual funding support increase from \$75,000 to \$100,000/year.

Five Year Review: Status Update – 2019 continued...

Area of Focus	Status
<p>Regional efforts: Develop Regional Affordable Housing Coordinator to oversee and manage new and existing and affordable housing units in Devens and surrounding communities to ensure they remain affordable in perpetuity</p>	<p>Ongoing.</p> <ul style="list-style-type: none"> • Contract with Metro West Collaborative Development to provide affordable housing monitoring services for the DREZ. • The Town of Harvard is expected to join the collaborative in 2020. • Hosted affordable housing fair in 2018 and 2019. • Informational sessions on housing for seniors provided in collaboration with area councils on aging in the fall of 2019. • Program featuring developer’s views of affordable housing was held at Devens in 2019.
<p>Working with MassDevelopment, local businesses and surrounding communities to support regional transportation plans and establish additional commuter options for businesses and residents to and from Shirley, Devens, Ayer and Littleton. Work on implementation of 2015 MART Transportation Plan and fixed route bus service between the train stations in Ayer and Shirley via Devens. Continue to support Fitchburg Line reverse commute early morning service to foster diverse commute options to Devens.</p>	<p>Ongoing.</p> <ul style="list-style-type: none"> • MBTA Fitchburg Line Commuter Rail upgrades allowing for a viable reverse commute to Devens. • Fixed route shuttle service connecting Fitchburg/Leominster to the employment lands within Devens and to the commuter rail stations in Ayer and Shirley launched in 2017. By the end of 2018, the service was averaging about 120+/- riders a week, including on-demand weekend service. Service continued throughout 2019 with on call services being provided over the weekends and being selectively deployed to help reduce the cost of service.
<p>Working with MassDevelopment and the Devens Open Space and Recreation Committee on updating the Devens Open Space and Recreation Plan (for 2020-2025 and permanent protection of identified properties.</p>	<p>Ongoing.</p> <ul style="list-style-type: none"> • DEC met with the Devens Open Space and Recreation Advisory Committee in 2017 to move forward with updating the plan. • Conservation Restrictions for Grove Pond and Willow Brook parcels were drafted in 2019 and being reviewed by the state. • Plan updates are expected to be complete in 2020.
<p>Improving safety, accessibility and connectivity in Devens and surrounding communities through new trails, sidewalks and bike lanes and working with MassDevelopment to adopt a Complete Streets Policy and continue to ensure all modes of transportation and accessibility are taken into account on all development projects that impact the right-of-way.</p>	<p>Ongoing.</p> <ul style="list-style-type: none"> • 2017 – Devens adopted a Complete Streets Policy • 2018 Devens Complete Streets Prioritization Plan developed with Howard Stein Hudson. • 2018 - Sidewalk connections along Chance Street between Grant Road and Elm and Walnut Streets, connecting new neighborhood with existing. • 2018 – Jackson Road bike lanes, sidewalks, school zone • 2018 - Met with surrounding towns to coordinate and plan future connections to trail and sidewalk networks, including participating in Ayer’s West Main street corridor plan launch event. • 2019 – Barnum Road re-striping and 2 miles of bike lanes added.
<p>Implementation of Transportation Demand Management (TDM) programs collectively as well as on a project by project basis, recognizing the Fitchburg Line improvements and opportunities it will create to reduce VMT for Devens employees and residents (reverse commute options).</p>	<p>Ongoing.</p> <ul style="list-style-type: none"> • Continue to promote and require TDM as part of our development reviews and assure that such measures are implemented and enforced. • Promote Fitchburg Line schedule, Devens shuttle bus circular and the opportunities these transit options creates. • 2019 - Draft update to Devens Transportation Management Initiative Overview/Application guidance (to be implemented in 2020). • Seeking ongoing support of Devens Shuttle from MassDevelopment as part of any future TIF agreements.
<p>Continue integrating climate change mitigation and adaptation into all development and conservation projects and build on creating a network of more resilient Green Infrastructure that can better adapt to changing weather patterns.</p>	<p>Ongoing.</p> <ul style="list-style-type: none"> • 2017 - DEC undertook a community engagement process to develop a Municipal Vulnerability Preparedness Plan. • 2018 – Partnered with MassDevelopment on a Greenhouse Gas inventory as part of an overall Climate Action Plan. • 2019 the DEC received \$142,000 grant through the MVP program to prepare a Climate Action and Resilience Plan (Devens Forward). Created a Climate Action Stakeholder Group (CASG) for community engagement. • Throughout 2019, the DEC continued to assure that climate change mitigation was considered as part of the development review process and supported the use of our Green Infrastructure Guidelines to the development community.

Five Year Review: Status Update – 2019 continued...

Area of Focus	Status
Maintain expedited permitting process (75 days max.) as a model for the Commonwealth.	<p>Ongoing.</p> <ul style="list-style-type: none"> • 2017 - Averaged 55 days to permit 4 Unified Permits. • 2018 – Averaged 45 days to permit 8 Unified Permits. • 2019 - Averaged 60 days to permit 7 Unified Permits.
Coordination with railroad, MassDevelopment and new projects within the Rail-Industrial Trade Related Uses (RIT) District to incorporate important rail connections in the RIT to help further reduce local traffic impacts and facilitate noise reduction efforts	<p>Ongoing.</p> <ul style="list-style-type: none"> • 2019 - Three new rail sidings were installed and activated to service the existing building and new expansion at 66 Saratoga Boulevard.
End point to Chapter 498 and process to reach it	<p>Ongoing.</p> <ul style="list-style-type: none"> • 2019 - DEC participating in the Devens Jurisdiction meetings being conducted with the Towns of Ayer, Harvard and Shirley along with MassDevelopment and citizens and businesses from Devens.
Continue to maintain fiscal independence.	<p>Ongoing.</p> <ul style="list-style-type: none"> • DEC remains fiscally independent. Another strong fiscal year for the DEC. • A clean audit for 2019 was completed.
Development and Implementation of a strategic planning effort to help prioritize ongoing sustainable redevelopment initiatives of the DEC.	<p>Ongoing.</p> <ul style="list-style-type: none"> • 2018 - DEC, in collaboration with MassDevelopment achieved 4-STAR certification: https://bit.ly/2G6Cj5O • 2018 – DEC awarded LEED for Cities and Communities designation by the US Green Building Council. These rating systems help us ID and prioritize our sustainable development efforts going forward. • 2019 - Devens sustainable development initiatives featured in articles in Planning Magazine and Business in Focus Magazine.
Manage Conservation Restrictions held by the DEC as the Devens Conservation Commission.	<p>Ongoing.</p> <ul style="list-style-type: none"> • Annually walk properties for which we hold Conservation Restrictions and enforce them as needed. • 2019 – drafted CR’s for Grove Pond and Willow Brook Priority Protection Areas (as ID’d in Devens Open Space Plan).
Forge new, mutually beneficial partnerships with organizations that share similar mission and vision as the DEC and Devens.	<p>Ongoing.</p> <ul style="list-style-type: none"> • 2012 - Regional Household Hazardous Waste Collection facility; • 2013 - Regional Emergency Dispatch Center; • 2015 - Regional Affordable Housing Monitoring; • 2017 - Municipal Vulnerability Preparedness Plan collaboration with surrounding towns. • 2019 – Filed joint MassWorks application with the Town of Ayer. • Devens Eco-Efficiency Center continued financial and technical support throughout the review period.
Continue integrating public health criteria into all decisions (healthy communities declaration)	<p>Ongoing.</p> <ul style="list-style-type: none"> • 2013 - DEC Healthy Communities Proclamation: http://www.devensec.com/news/Healthy-Communities-Proclamation_PR11-8-13.pdf • Triple Bottom-Line Benefits of Street Trees and Street tree Replacement program • Continued enforcement of local greenhouse gas mitigation requirements on all projects and approval of development patterns that support healthy and active living (Devens Village Green, sidewalks, trails, bike lanes, etc...).
File management and organization to continue maximizing space and improving efficiency and service to the public–review MA records retention laws to determine which paper files and plans, if any, may be able to be destroyed now that electronic copies are preserved.	<p>Ongoing.</p> <ul style="list-style-type: none"> • I-Pads for Commissioners to reduce paper usage; • Updated computers and software; • 2018 - DEC hired ARC and began digitizing all of our records. By the end of 2018, approximately 80% of files and plans were uploaded to a secure cloud storage site for quicker and easier public access. This work continued throughout 2019. • 2019 - Director Lowitt appointed Records Access Officer to comply with state statutes.

Communications and Outreach:

DEC Website: The DEC web site, www.devensec.com continues to be a major source of information on the Commission and its activities in Devens. Agendas, annual audits and staff reports provide a wealth of information to the community and public. Quarterly development updates also help keep the public current

with ongoing projects and commission business. Throughout 2019, the DEC updated its website with meeting and public hearing notices, staff reports, important community news and events information, monthly army noise reports, and other general information on living, working and developing in Devens <http://www.devensec.com/news.html> . This page also

featured a link to a recent article featured in an article in Business In Focus Magazine about Devens sustainable redevelopment efforts: <http://bit.ly/DevensBIFArticle>.



Located in central Massachusetts, Devens is a regional enterprise zone perfect for businesses looking to boost their eco-efficiency as they grow. The 4,400-acre former army base, which is less than an hour's drive from Boston and 35 minutes from Worcester, has been repurposed as a model of sustainable development. Within three years, the community, named for Civil War General Charles Devens, will be LEED certified to the newest standards.



Written by Samita Sarkar

This uniquely recognized U.S. Green Building Council (USGBC) standard means Devens will meet the modern requirements under LEED for Communities, version 4.1. Devens has been working to become an environmentally friendly haven for booming businesses since 1996, when Fort Devens was closed and turned over to the Commonwealth of Massachusetts for redevelopment.

One unique feature that makes this historic, self-contained community of engaged residents and thriving world-class business so desirable is its eco-industrial park. The fully serviced industrial park, accessible via public transportation, provides a space for businesses to conduct by-product exchanges

the Devens Eco-Efficiency Center, a one-of-a-kind outgrowth that offers educational forums, technical assistance, networking events, and partnership opportunities to keep the community's businesses running smoothly.

For instance, while a local aircraft company was receiving its components with packing peanuts, a machine tool company, Waterloo Machine, Inc., was buying peanuts to use in packaging. The Eco-Efficiency Center brought two 56-gallon tanks that allowed for the companies to arrange swaps. Nothing enters the landfill, and both companies are now saving

Business In Focus magazine article on Devens sustainable redevelopment – June 2019.

The Devens Sustainability page was also updated to highlight many of the accomplishments of the DEC and its partners (STAR/LEED for Cities and Communities, GHG Inventory and Climate Action Planning, Green Infrastructure Guideline's, Net Zero and Energy Positive housing): <http://www.devensec.com/sustain.html> .

DEC Facebook Page: The DEC Facebook page continues to help inform the general public on the work of the Commission and supplements the DEC website by providing an additional social media outlet for residents, businesses and interested parties to stay up to date on projects, meeting announcements and notices from the DEC. In 2019, we published 117 posts that reached over 8,500 people. Follow us at: <https://www.facebook.com/devensec/> .

Community Cable Access: Throughout 2019, the DEC continued to record all meetings for rebroadcast on the local access cable television channels in our host communities. The host communities' cable volunteers record the meetings for airing on local cable. This is a collaborative effort, with DEC and MassDevelopment providing the equipment and the communities supplying the volunteers to record the meetings. Continued thanks to Brint Ferguson and Dawn McCall for their ongoing support recording the DEC meetings!

Additional Outreach: DEC Staff continued to promote and raise awareness of Devens role as an eco-industrial park and model of sustainable development by hosting a number of tours of Devens to interested groups from universities, businesses and industry from Massachusetts and abroad. In June, DEC Director Peter Lowitt presented Devens Green Infrastructure and Low-Impact Development strategies at the "Making Cities Livable" Conference in Portland, Oregon. In September Mr. Lowitt discussed green infrastructure in Devens at the Minneapolis, MN Grey to Green Conference as well.

Both Mr. Lowitt and DEC Environmental Planner Neil Angus presented "Seeing the Unseen: Phase 2 of the "Devens Biometric Study to Understand the Unconscious Human Experience of a new Development" project with Tufts University at the Southern New England APA (SNEAPA) Planning Conference in Springfield, MA in October. Mr. Lowitt and SNEAPA co-presenter Ann Sussman also spoke about this study at the UX + Design Conference at Tufts in the spring of 2019. In collaboration with the US Green Building Council and the Director of Sustainability and Planning from the City of Northampton, Mr. Angus led a presentation at the SNEAPA conference on the STAR and LEED for Cities Certification programs in Devens.

At the American Planning Association (APA) National Conference in San Francisco in April, Mr. Lowitt chaired a session on “Trends in Green Roof Policy” where he shared Devens Green Roof Regulations and Policy with an international audience. In 2019 Mr. Lowitt also served on the FutureShape Research team for APA, helping to set a research agenda for Planning for the next ten years. Towards the end of 2019, Mr. Lowitt and Mr. Angus volunteered with APA to share their experience with climate mitigation and adaptation planning at Devens to help draft the 2020 update to APA’s Policy Guide on Climate Change.

Financial and Performance audits:

2019 was another fiscally responsible and sustainable year for the DEC. Our financial audit will be posted on the DEC web site at: <http://www.devensec.com/meetings.html> .

Outlook for 2020:

In 2020 the DEC expects to continue focusing on the review of redevelopment projects while implementing eco-industrial development, transportation options, as well as healthy, sustainable, and climate-friendly planning processes. Projects anticipated for 2020 include:

- Continue to support Complete Streets projects identified in the Devens Complete Streets Prioritization Plan and work with MassDevelopment and surrounding towns to obtain state funding for joint projects. Amending the Complete Streets Plan to be a Green and Complete Streets Plan.
- Continue working to complete and implement the Devens Forward Climate Action and Resilience Plan for Devens and launch the Devens Dashboard to track and report progress.
- Produce a Devens Forward video highlighting the sustainable development assets within Devens and our on-going efforts for continuous improvement and leading by example.
- Continued support for the Devens Eco-Efficiency Center growth and expansion of service offerings.
- Expanding regional collaboration and equitable access to locally grown, healthy food options through the Devens Farmers Market.
- Additional funding to support more street tree planting and the development of a Street Tree inventory and formal replacement planting program.
- Focus on additional Transportation Demand Management (TDM) strategies to reduce single occupancy vehicle trips and provide additional support for equitable and alternative modes of transportation including the Devens Shuttle.
- Finalize and accept the Conservation Restrictions for the Grove Pond and Willow Brook parcels to permanently protect these resource areas in accordance with the Devens Open Space and Recreation Plan.
- Resolving the ongoing lawsuit between Devens (DEC & MassDevelopment) and Conservation Law Foundation.
- Continue the Biometrics by Design Study with Tufts University to examine signage and wayfinding.
- Making minor upgrades to the DEC’s Rules and Regulations through the CMR process;
- Focusing on unified permitting of existing and new projects, including, but not limited to:
 - Phase 2 of Devens Village Green innovative residential development neighborhood on Grant Road;
 - Construction of the McInnis Cement Distribution facility off Barnum and Saratoga;
 - BMS Phase III expansion;
 - An Innovative Clean Energy Project;
 - Military Defense contractor possible expansion at Devens;
 - Large multi-tenant Bio-Tech campus project off Jackson Road;
 - Additional upgrades to Devens wells to permanently address PFAS issues;
 - Welcoming a local brewery to the Corregidor Theatre site;

Respectfully submitted by DEC Commissioners:

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James DeZutter

William Castro

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Marty Poutry

Melissa Fetterhoff

Jim Pinard

Paul Routhier

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