



# Bulletin - Spring 2014

[www.lwv-andovers.org](http://www.lwv-andovers.org)

Spring 2014

Steering Committee: Maureen Sundberg & Stefani Traina

Vol. 19 No. 2  
Published Quarterly

## League of Women Voters of Andover/North Andover Newsletter

### In This Issue

[Steering Committee Letter](#)

[Calendar of Events](#)

[Andover Voters Service](#)

[Andover's Community Paths](#)

[Bottle Bill Update](#)

[Getting Personal about Energy](#)

[Phonathon](#)

[LWVMA Council](#)

[Annual Meeting](#)

[North Andover Voters Service](#)

[Retiree Health Care Benefits](#)

[Thank You's](#)

[Resources of Interest](#)

[About the League of Women Voters](#)

[Membership Information](#)

### Our Sponsors



**Heather Moody Holman**  
REALTOR®



**RE/MAX**  
**Partners**

44 Park Street  
Andover, MA 01810  
Access Line/Fax 978-482-3511  
Office: (978) 475-2100  
Email: Heather@HeatherHolman.com  
Web: www.HeatherHolman.com

Each Office is Independently Owned and Operated.

[Visit my website](#)

### The Financial Advisors

**Richard L. Sumberg**

15 Railroad Street Ph. (978) 475 3242  
Andover, MA 01810 Fax (978) 475 3489  
e-mail: Dicks@the-financial-advisors.com

*Helping people make better financial decisions*

[Visit our website](#)

### Letter from the Steering Committee Co-Chairs

Dear Members,

The local League finds itself at a crossroads as the year winds down. Over the last few years much of the League's work has fallen on a few people. We've appreciated help from many quarters this year, but find that we both need to reduce our League responsibilities next year. We hope that others will step in to take over the leadership duties. Please give some thought to what you can do to help keep the League going. We've [posted a list](#) of League tasks and roles; we hope many members will take on roles, as they did this year, and help keep the League strong.

Maureen Sundberg & Stefani Traina

### Spring 2014 Calendar

Many events are still being developed. For the most up to date calendar information visit [our website](#).

#### April

- 7 Mon [Gardeners & Climate Change](#), Memorial Hall Library, 7:00pm.
- 10 Thur Board Meeting, Memorial Hall Library, 7:00pm. All welcome.
- 12 Sat [Community Shredding](#), Memorial Hall Library parking lot, 9:00am to noon, rain or shine.
- 15 Tue Last day to register to vote at Andover Town Meeting. Clerk's office open 8:30am-8:00pm.
- 23 Wed Andover Town Meeting Budget & Warrant Preview, 7:00pm, Memorial Hall Library.

#### May

- 3 Sat Andover Zero Waste Day, 9am-1pm, Brickstone Square.
- 5 Mon Andover Town Meeting, AHS Collins Center, 7:00pm.
- 6 Tues Andover Town Meeting, AHS Collins Center, 7:00pm.
- 10 Sat [LWVMA Council](#), Framingham State University.
- 20 Tue North Andover Town Meeting, 7:00pm.

#### June

- 19 Thur Annual Meeting, Marland Place, Stevens St, Andover.

**JOHNSON &  
BORENSTEIN, LLC**  
ATTORNEYS AT LAW

*professional expertise, personal commitment*

Mark B. Johnson | Donald F. Borenstein

12 Chestnut Street, Andover, Massachusetts 01810-3706  
phone: 978.475.4488 fax: 978.475.6703 e-mail: info@jblclaw.com

[www.jblclaw.com](http://www.jblclaw.com)

[Visit our website](#)



**Andover Liquors**  
Fine Wines, Beers & Spirits Est. 1976

Starbucks Plaza  
209 N Main St  
Andover, MA 01810  
tel: (978) 470-0300 fax: (978) 470-1944  
[www.andoverliquors.com](http://www.andoverliquors.com)

[Visit our website](#)

*Quiet Pleasures Jewelry*

*Jewelry, Gifts & Unexpected Necessities*

*Kay Demaso, Owner*

29 Main Street  
Andover, MA 01810  
978-474-0390

[gpjewelry@aol.com](mailto:gpjewelry@aol.com)  
[www.quietpleasuresjewelry.com](http://www.quietpleasuresjewelry.com)

[Visit our website](#)

## Voters Service

### Andover Voters Service

**Town Meeting Budget and Warrant Preview**

**Wednesday, April 23, 7:00pm**

**Memorial Hall Library**

**Look for more information in the next League News**

## Margaret Pustell's Legacy Andover's Community Paths

**by Al French**

The Andover Trails Committee proposes to take up Margaret's unfinished but critical initiative and looks for help from those who would like to participate in realizing her vision.

The Community Paths project was initiated in the mid-to-late 1990's by the Andover League of Women Voters and spearheaded by Margaret Pustell until her death in 2012. Margaret Pustell formed and led an ad-hoc citizens committee: The Andover Community Paths Committee. Its mission was to:

- Provide safe and convenient routes for walking and bicycling away from automobile traffic;
- Reduce dependence on cars for local trips;
- Link homes with schools and playgrounds for safe and easy access for children and parents;
- Link neighborhoods with each other to promote a sense of community;
- Allow children to visit friends' homes without Mom's taxi service;
- Link neighborhoods with train and bus stations and local stores;
- Promote healthful walking, bicycling, and enjoyment of nature;
- Increase real estate values;

More than thirty "community paths" were identified. Many were approved by Town officials, marked with a plastic square logo, and monitored by neighborhood "path minders". Virtually all are on town property, short in length compared to Andover's recreational trails which are mostly on private conservation land.

The Andover Trails Committee (ATC) has evaluated the current status of these community paths. While several are well marked and functioning the majority are not currently serviceable. They need remarking, simple maintenance, and functioning "path minders". Some are completely unusable, needing major maintenance or have ownership problems. Other community paths are in the formative stage; a few are no longer feasible.

ATC is looking for volunteer "path minders" who preferably (but not necessarily) live on or near the following streets:

Andover St (246 rear);  
West Parish Dr. at Birch Rd./Virginia Rd. at Shirley Rd.;  
River St. to South School;  
Cutler Rd./Oriole Dr.;  
High Plain Rd./West El. Sch.;  
Andover St (between 264-270);  
Andover St. (222 Rear);  
Powers Rd./Wyncrest Circle;  
Summer St(Gudron Dr./Elm St./Dearborn Ln;  
Stafford Ln/Lowell St (W. of 31); B  
eacon St./Shirley Rd.;  
Sunset Rock Rd./Rattlesnake Hill Rd.;  
Stevens St, (Marland Place)/Joyce Terrace(via Castle Pk.);  
Tewksbury St (between 87-91).

For expressions of interest or more information, please email  
[AndoverCommunityPaths@gmail.com](mailto:AndoverCommunityPaths@gmail.com) or call Al French (978)475-4910.

## Bottle Bill Update

Phase 2 of the Updated Bottle Bill signature campaign begins in May. The Updated Bottle Bill Coalition collected 130,000 signatures in the fall (20,000 of those were collected by MA Leagues), and now the coalition needs to collect an additional 22,000 signatures. These new signatures will be collected on new petition sheets from **registered voters who did not sign the bottle bill petition in the fall.**

Before our League commits to collecting signatures, we want to make sure we have members interested in participating. This collection period is short. We will get the petitions sometime prior to May 21, and they need to be submitted to Town Clerks by June 18.

Before our League commits to working on Phase 2, we need to know how many are interested in collecting more signatures to get the Bottle Bill on the ballot. If you want to work on this, let us know: [league@lwv-andovers.org](mailto:league@lwv-andovers.org).

## Getting Personal about Energy

by Anil Navkal, Solar Coach, Andover  
With generous and plentiful editorial help from my dear wife Naomi Navkal

It's fascinating to list the units we use when we talk about energy: gallons, barrels of oil, cu. ft. of natural gas, therms, BTUs, MMBTUs, calories, food calories, Tons of A/C, kW, kWh, MW, MWh; and this is only a partial list. No wonder most of us are confused about energy issues. What we have is a room full of folks, each speaking a different language. There is plenty of cross-talk, but not much conversation. Just as we benefit from using a common language to have a dialogue, using a commonly used energy unit is needed to have a meaningful conversation on energy.

There are three motivations for expanding our use of sustainable energy. First, fossil fuel is a finite resource. Second, since most nations have to import energy, it's fundamentally a security issue. Third, scientists agree that burning fossil fuel affects the climate.

Let's talk about CO<sub>2</sub>. Burning fossil fuel increases CO<sub>2</sub> in the atmosphere. We know this because scientists have studied air trapped in ice cores. Since 1958, they have also directly studied the increase in CO<sub>2</sub> concentrations in the atmosphere. The graph in Figure 1 shows these findings.

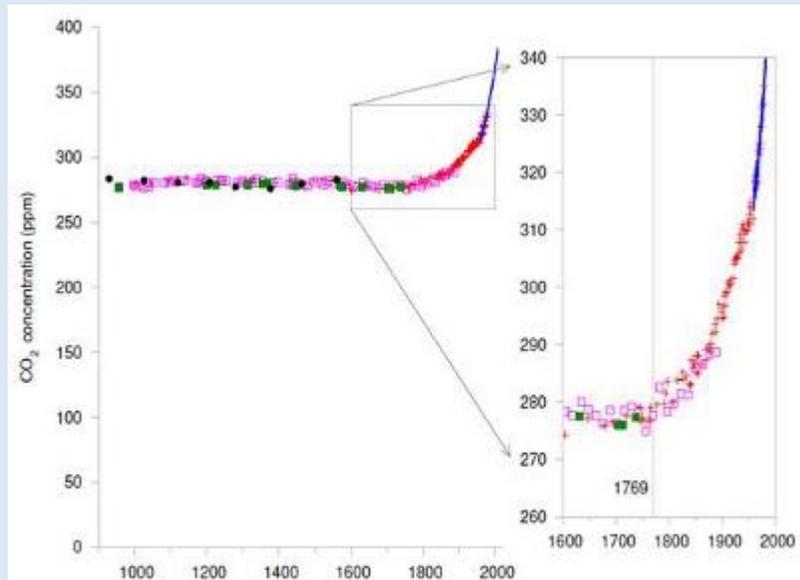


Figure 1: Carbon dioxide (CO<sub>2</sub>) concentrations (in parts per million) for the last 1100 years, measured from air trapped in ice cores (up to 1977) and directly in Hawaii (from 1958 onwards).

It's interesting to compare the growth over time of CO<sub>2</sub> concentrations and fossil fuel production. This comparison is shown in Figure 2. From 1769 until 2006, coal production increased 800 times. Coincidentally, in the late eighteenth century the world moved from horse power to "hot" power. Thus began the industrial revolution. From almost negligible CO<sub>2</sub> emissions in the early 1700s, we are now adding 25 billion tons of CO<sub>2</sub> (25 GtCO<sub>2</sub>) per year to the atmosphere.

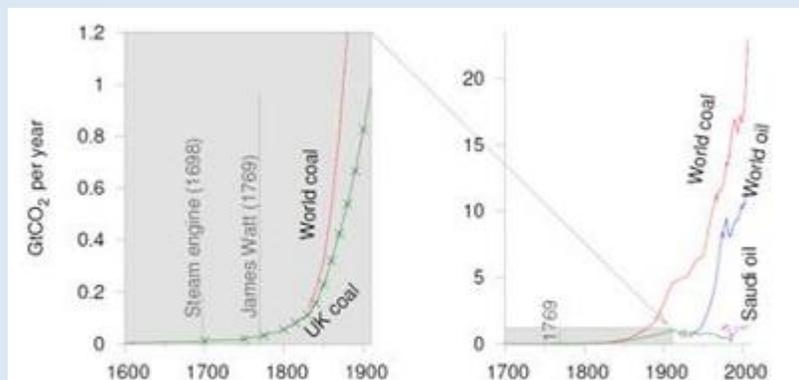


Figure 2: CO<sub>2</sub> emissions compared with coal and oil production over last 300 years

The burning of fossil fuel is the principal reason why CO<sub>2</sub> concentrations have increased. The skeptics argue that this increase is significantly smaller than what natural cycles contribute. They are indeed right. What they omit to say, however, is that such natural flows are bidirectional. Bidirectional natural flows cancel each other, leaving the concentration of CO<sub>2</sub> in the atmosphere and in the ocean remarkably unchanged. Burning fossil fuels, in contrast, creates a new flow of carbon which, though relatively small, is unidirectional and is not cancelled. That is the crux of the problem. When it comes to CO<sub>2</sub> concentrations, man's contribution thus becomes significant.

CO<sub>2</sub> is a greenhouse gas. Due to the physical properties of its molecules, CO<sub>2</sub> absorbs infrared radiation (heat) heading out from the earth and re-emits it in random directions. The effect of this random redirection of atmospheric heat is to insulate the planet, as if the planet were wrapped in a blanket. Greenhouse gases form a multilayer blanket, and CO<sub>2</sub> is one of the layers. If we include other greenhouse gases, based on 2014 data, we get an equivalent of greenhouse gases to the tune of 36 GtCO<sub>2</sub>e/year of emission (CO<sub>2</sub>e: CO<sub>2</sub> equivalent).

To understand such big numbers, let's try to make them personal. Today's world population is approximately 7 billion. Using this number we can calculate greenhouse gas production per person as 5 tons of CO<sub>2</sub>e (5tCO<sub>2</sub>e) per person per year. In the US, the contribution per person is about 25 tCO<sub>2</sub>e, whereas in Bangladesh, it's about 1 tCO<sub>2</sub>e. Europe is somewhere in-between at 10 tCO<sub>2</sub>e. Scientists have concluded that to reasonably manage the effect of global warming caused by the emission of greenhouse gases, the world needs to reduce emissions to 1 tCO<sub>2</sub>e/person/year by 2050! The only way to reach this goal is by significantly reducing our dependence on fossil fuel, expanding our use of renewable energy, and increasing efficiencies across the board.

Let's now look at the source of greenhouse gas emissions.

Figure 3 illustrates that CO<sub>2</sub> has the most impact among greenhouse gases. Most CO<sub>2</sub> emissions come from burning of fossil fuels for energy.

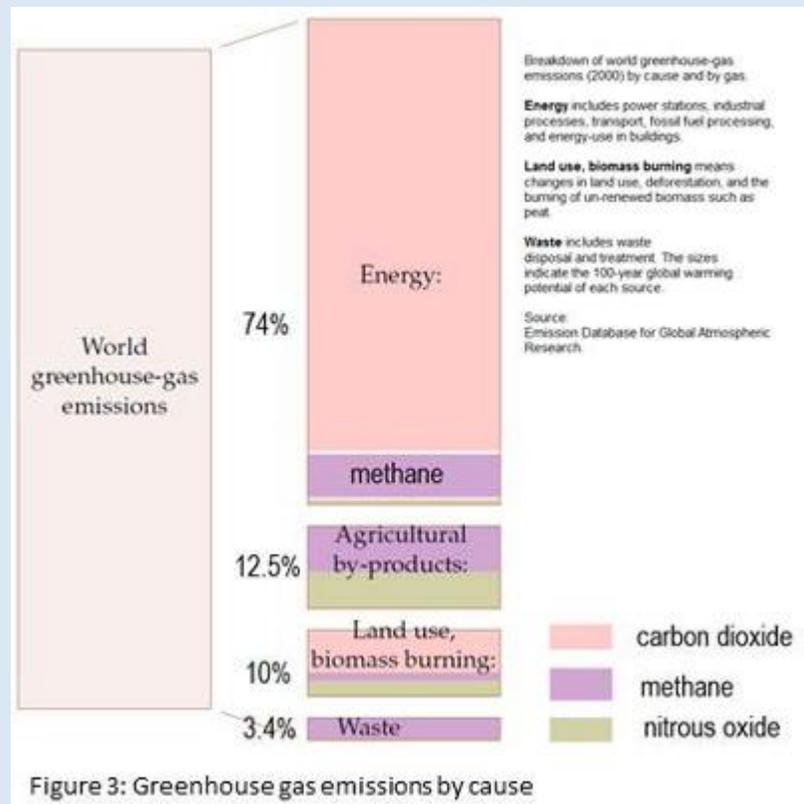


Figure 3: Greenhouse gas emissions by cause

In the year 2000, methane, which is an agricultural by-product, contributed approximately one eighth to the total of greenhouse-gas emissions. But CO<sub>2</sub>, which is a by-product of energy production, contributed three fourths. While methane's contribution is not trivial, the bigger culprit is the energy used by humans.

If want to substantially reduce our CO<sub>2</sub> emissions, it is imperative that we find a new way to address our energy needs.

Discussion on energy invariably involves using some form of energy units. Comparing different forms of energy use can get foggy if we use different units for each energy type. Of course, it's natural to use units specific to each energy type. For example, we buy 10 gallons of gas, or use 200 therms of natural gas per month, or 200 gallons of fuel oil each season, or 500 kWh of electricity per month. And yes, we pay using one currency. We of course know the amount we pay for each energy bill. What we don't know is how to compare the amounts of energy we purchased. In order to simplify this, we will introduce a common metric for this discussion: the electrical energy used by a 40W light bulb in a day. While such an incandescent bulb is fast becoming a relic of the past, it still gives us a good, familiar yardstick for quantifying energy usage at a personal level.

Approximately 1 kWh of energy is consumed by turning on a 40W light bulb for one day. That is,  $40\text{W} \times 24 \text{ Hours} = 960\text{Wh}$ , or approximately 1 kWh. Using this as yardstick, let's see how my energy usage measures up!

- An average adult consumes 2000 calories a day. That is approximately 3 kWh or 3 of our light bulbs on for one full day.
- A gallon of gas is equivalent to 33 kWh. If you get 30 MPG, and you travel 40 miles per day, you are using 40 kWh. (40 miles / 30 miles per gallon = 1.3 gallons.)
- My house uses about 1,400 therms of natural gas per year. One therm is 29.3 kWh. So, my house uses 112 kWh per day. (1400 therms X 29.3 kWh = 41,000 kWh per year, or 112 kWh per day.)
- My son lives on the West Coast. By making one visit, I consume 12,000 kWh. If I make only one visit per year, I effectively use 30kWh/day.
- Electricity used by my household is about 8000 kWh/year or 22 kWh/day.
- The Town of Andover uses 127,000 MMBTUs per year. Andover's population is 33,000. So, we use about 3.84 MMBTUs per resident per year. One MMBTU is about 293.29 kWh. Thus, Andover uses 3 kWh per day on my behalf.

Adding this up, my personal energy consumption comes to about 165 kWh/day. For Massachusetts, the average per-person consumption is about 170 kWh/day.

Figure 4 shows my personal energy consumption using kWh/day as a unit. I have also included what I pay for that energy.

If we aggregate the entire US energy consumption and divide by population, we get 250 kWh/day/ person. Europeans use 160 kWh/day/person. The numbers for few other nations are as follows:

China: 45, India:10, Israel: 90, Sweden: 180, UK:125, Germany:130, Russia:140, Singapore:225.

Solarize programs offered by MassCEC give Massachusetts property owners a unique opportunity to consider the use of solar energy for their electricity and hot water needs. Due to various federal and state incentives, as well as market forces, owning a solar electric system has become an attractive investment choice. A typical solar electric system will pay for itself in 4-5 years. Depending on the size and your own electrical energy usage, the solar system can significantly reduce your dependence on fossil fuel. The solar system on my own roof satisfies 100% of my family's electrical energy needs.

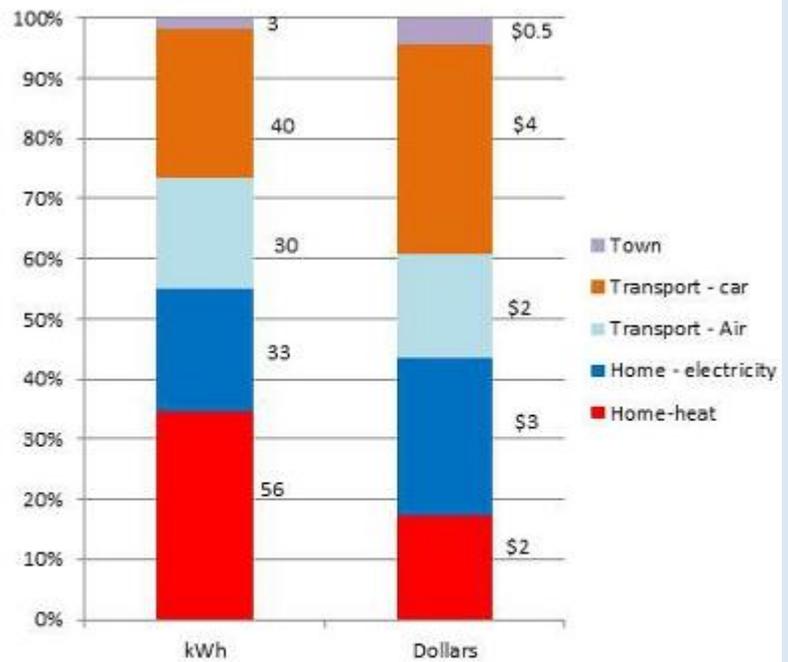


Figure 4: My energy usage in kWh/day/person. For every kWh of electricity I use, 3 kWh are burned in fossil fuel. So, effectively, I use 33 kWh of energy per day. What I am billed for is of course 11 kWh of electrical energy I use.

Our new, high-efficiency boiler is designed to heat both our house and hot water. Since we no longer need an external hot water heater, we have eliminated the associated heat loss.

We drive hybrid cars (Prius). They may not be as efficient as electric vehicles, but they are much better than most conventional cars. We get on an average 45 mpg.

We would love to explore geothermal energy for heating and cooling our house when it becomes a cost effective alternative.

I hope this paper gives you some perspective on how we as a society use our energy, and how the choices we make as individuals may have an impact on a global scale. We all want to do our share to help out with bigger issues. It's important that we guide our individual actions based on facts and financial realities. The scales of the problems we are trying to address are sometimes incomprehensibly big. But we can use our global awareness to act locally. Transportation alternatives such as bicycles and electric cars, and alternative sustainable energy sources such as solar energy, all go a long way to address bigger issues at the grass-roots level.

It is time for us to say, "Yes, in my backyard!" (YIMBY)

#### References:

1. The article is solely based on ideas presented by David J.C. MacKay in his following book: David J.C. MacKay. Sustainable Energy - without the hot air. UIT Cambridge, 2008. ISBN 978-0-9544529-3-3. Available free online from [www.withouthotair.com](http://www.withouthotair.com).
2. Opportunities and challenges for a sustainable energy future  
Steven Chu & Arun Majumdar  
Nature 488, 294-303 (16 August 2012) doi:10.1038/nature11475  
Published online 15 August 2012

3. David MacKay, Scientific Advisor to the Department of Energy and Climate Change, UK <https://www.youtube.com/watch?v=GFosQtEqzSE>  
Harvard University Oct 25, 2010

4. Center for Environment. David MacKay, Scientific Advisor to the Department of Energy and Climate Change, UK addressed energy issues at a macro and micro scale with the Harvard University community and beyond

## Phonathon Final Numbers!

Thank you to all our members and supporters who contributed to this year's LWVMA Phonathon. Our local League netted over \$300 from the fundraiser.

We appreciate the time Ann Cobleigh, Joan Duff, Heather McNeil, and Maureen Sundberg put into making phone calls and mailing letters. A couple of hours made a big difference!

## First Call to LWVMA Council 2014

### **Civility in Politics: Challenge to Good Government Saturday, May 10, Framingham State University**

#### **Schedule of Events**

10:00 am Registration  
10:30 am General Assembly  
12:30 pm Lunch and Guest Speaker  
1:45 pm Discussion on Council Theme  
2:20 pm Workshop Session 1  
3:15 pm Workshop Session 2  
4:00 pm Adjourn

#### **Our Guest Speaker:**

Susan M. Jeghelian is the Executive Director of the Massachusetts Office of Public Collaboration (MOPC), a statutory state agency at the University of Massachusetts Boston that functions as a neutral forum and state-level resource for public policy dispute resolution and collaborative governance.

#### **What will we do at Council 2014?**

- Have fun!
- Get updates on Campaign Finance Reform, Election Reform, Gun Safety and more!
- Hear from Task Forces and Study Groups
- Discuss the theme of civility and politics
- Provide an opportunity for members to give direction to the LWVMA board
- Prepare for Election 2014
- Meet League Members from across the state
- Find out what Leagues in Massachusetts are doing

Registration is \$45, including a buffet lunch (registration will be coming soon).

For more information [click here](#).

## Annual Meeting - Save the Date

The League of Women Voters of Andover/North Andover will meet at Marland Place, Stevens St., Andover, on June 19th for its Annual Meeting. Look for details in future League News.

### North Andover Voters Service

We have been busy with Voter Education here in North Andover.

We held our North Andover Candidates Night and urged people to go to the polls on March 25th. We have no *new* elected officials as the incumbents - Tracy Watson, Donald Stewart, Stan Limpert, Brian Gross and Frank Rossi - were all re-elected.

Currently, Phila Slade is working with Diane Huster on revising our Town Meeting Pamphlet - a newcomers guide to Town Meeting - which was originally written by Marty Larson. We are hoping to have brochures and yard signs available soon in advance of our Town Meeting. Diane will also be presenting the League of Women Voters Book Award to a high school student this spring.

On an exciting note, our Town Moderator is looking to try innovative ways to involve more people in the discussion at Town Meeting. He has asked the League to be the organization to take questions via email or another source from people watching Town Meeting at home during the event. I am excited to try it, but cannot move ahead without at least one volunteer - I have no takers yet. There is little prep work - maybe one meeting or phone call prior to Town Meeting. You would need to come to Town Meeting on Tuesday, May 20th at 6:30pm and stay the duration. If interested, let me know ASAP so I can get back to our Moderator. Please call me for details: 978.686.6717.

Also, we are in need any and all hands on deck! Personally, my career has changed in the last few months, and I have less time for the volunteer work I do. Our League is in a very good space! We have some new members. We have a good rapport with our town officials. It is an excellent opportunity to learn how our town operates and to meet more people. The time commitment can be flexible.

I would love for the important work we do to continue as we are the only organization that provides nonpartisan voter education in our town. If you have any interest or time to give, please let me know or the services we provide may be changing. Thank you!

Heather McNeil  
978.686.6717  
[h\\_mcneil@hotmail.com](mailto:h_mcneil@hotmail.com)

## Retiree Health Care Benefits

### Winchester LWV Educational Forum

View this forum recently held by the Winchester League: <http://vp.telvue.com/preview?id=T01974&video=190811>

## Thank You

Many League members and friends helped with events for the past few months. Many thanks to all of them, especially to:

Bonnie Zahorik for quickly organizing a STEAM Studio cable forum, and to David Birnbach, Dennis Forgue, Annie Gilbert, and Ron Lasser.

Joan Duff and Lolli Sumberg for their work on the Town Meeting Members' Event at Marland Place.

Liz Elowe, Nuala Boness, Jackie Kovacs for another terrific Chocolate at the Addison.

Ann Knowles for her work on From Farm to Plate with local farmers Rich Bonanno, Lisa Colby, and Glenn Cook. Many thanks to Cindy Blandini, as well.

Heather McNeil, Kathy Stevens, Caroline Cole, Keith Connors, Phyllis Jones, and Becci Backman and the NACAM Crew for North Andover's Candidates' Event. Thank you to the candidates as well who make the effort to participate each year.

Nancy Mulvey, Annette Grams, Emily Granoff, Lauren Grams, Sean, and Heather McNeil, moderator for Andover's Candidates' Night.

Phila Slade and Diane Huster for working on the Town Meeting Pamphlet and to both of them and Phyllis Jones for meeting about the future of our North Andover League.

## Resources of Interest

Following are links to articles and information that might be of interest to our members. Topics range from running for office to environmental issues and everything in between.

Looking for good consumer advice? try:

<http://www.masspirgedfund.org/issues/usf/consumer-tips>

In addition to the League's own [Running for Office Workshop](#), people interested in learning more about running a campaign can refer to American Campaign School at <http://americancampaignschool.com/>

Find information about League studies completed across the country at

<https://sites.google.com/a/leagueofwomenvoters.org/clearinghouse/>

Trying to describe the branches of government or the constitution to kids? Looking for great activities about the rights and responsibilities of citizenship? Look no further:

<http://www.icivics.org/>

Check the validity of those political claims:

[FactCheck.org](http://FactCheck.org) (U of PA)

[PolitiFact.com](http://PolitiFact.com) (Tampa Bay Times)

[Washington Post's Fact Checker](http://Washington Post's Fact Checker)

Another tool for voter information is: <http://votesmart.org>

## About the League of Women Voters

The League of Women Voters is a 93-year-old national nonpartisan political organization that encourages the informed and active participation of individuals in government, works to increase understanding of major public policy issues, and influences public policy through education and advocacy. The League neither supports nor opposes candidates for office, elected officials or political parties at any level of government.

The Andover/North Andover League focuses on topics directly impacting the citizens of our communities.

League membership is open to all citizens, both women and men.

### Membership Form

Sign up [online](#) or complete and mail the form below. When you sign up online you will have the option of paying by credit card or PayPal. The League's membership year is July-June.

\_\_\_\_\_ New      \_\_\_\_\_ Renewal

\_\_\_\_\_ \$60 Basic Member

\_\_\_\_\_ \$65 Contributing Member

\_\_\_\_\_ \$75 Sustaining Member

\_\_\_\_\_ \$100+ Patron

\_\_\_\_\_ \$40 Senior Citizen (65 yrs. old and over)

\_\_\_\_\_ \$40 Student (under 24 yrs. old)

\_\_\_\_\_ \$75 Household Dues (2+ persons in same household)

\_\_\_\_\_ In addition to my membership fee, I'd like to make a contribution of \$\_\_\_\_\_.

\_\_\_\_\_ Enclosed is a separate check containing my tax-deductible contribution of \$\_\_\_\_\_ payable to the Education Fund, which supports the LWV's educational activities.

Please make checks payable to:  
"LWV OF ANDOVER/NORTH ANDOVER"

Mail form and check to:  
LWV of Andover/North Andover  
P.O. Box 514, Andover MA 01810

#### Member Information

Name \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_

Email \_\_\_\_\_