



**Sustainability, Energy
& Resiliency Committee**
City of Salem, MA

The Salem Sustainability, Energy, and Resiliency Committee held a public meeting on
Wednesday, June 23 2021 at 6:30 PM via remote participation.

In Attendance

Board Members:

Chair John Hayes	Rick Nye
Vice Chair Jeff Cohen	Doug Bowker

Not in Attendance:

Meg Riccardi, City Council liaison
Esmeralda Bisono, City Staff
Phil Koch
Chris Cantone
Gail Kubik

City Staff:

Jenna Ide, Director, Sustainability and Resiliency Department		
Stacy Kilb, Green Communities Coordinator, Sustainability and	Resiliency Department (Recorder)	Emma Bird, Intern, Sustainability and Resiliency Department

Public:

Pat Reed, SATV (recording)
Screen Names:
Jenn Sell
Joshua Nagle
Ethan Henshaw
Veronica Faustino

Introductions

Public Comment (limited to one minute per person, must be limited to current discussion/within SERC jurisdiction)

Ethan Henshaw promotes Keep Salem Beautiful Clean Ups; the next event will be Sat. June 26 from 12-1:30, at the basketball court in the Point. Bags and grippers will be supplied.

Review & Approve Meeting Minutes – May 26, 2021



A motion to approve the minutes, pending revisions submitted by Friday at 11AM to Stacy Kilb, is made by Jeff Cohen, seconded by Doug Bowker, and passes unanimously.

Jeff Cohen Yes
John Hayes Yes
Doug Bowker Yes
Rick Nye Yes

New City Sustainability and Resiliency Department Introduction (John & Jeff)

Jeff Cohen comments that we cannot mitigate the climate crisis with incremental measures; bold action is needed. We must be focused, and having a department that does not need to request resources from other departments is significant. He is glad the Council voted for it, and that Jenna, Esmeralda & Stacy will be part of it. This department will produce more revenue than it will use. Also, having an all-women department is a good thing, given how men have managed the world thus far. Congratulations to the women in this Department.

John Hayes echoes Jeff's comments and outlines the history of the Department.

RETF goal 15 years ago:

- Advocated for full time Energy & Sustainability Manager
- Long term goal was formation of Sustainability and Resiliency Department
- 3 positions open: Engagement Coordinator, Energy Manager, and Administrative Assistant

Jenna Ide thanks everyone present, noting that this is a huge milestone, having more staff to implement Resilient Together work.

- We are seeking diverse, local people to fill these positions.
- Focus areas:
 - Energy Manager – City Operations, Energy use reduction and solar
 - The resiliency part should be grown in the future, but for now we are expanding our existing focus.
 - A new position may be created in the future for someone with a background in engineering.
 - We are hoping to work with other Departments. We have the MAPC grant to work with, as well as an MOU with National Grid to promote higher goals with Mass Save.
- She notes that the part time administrative accounting assistant position will be important

Doug Bowker congratulates everyone involved. He wonders how many Cities have such Departments. SERC has been and will continue to function as an advisory committee, but to have a Department with Sustainability and Resiliency as its focus is a big deal. He would like to see other cities form such Departments.



John Hayes comments that many communities, cities and towns have some sort of Energy or Sustainability Manager. However, few have an actual Department. Positions are typically incorporated into other departments.

Rick Nye comments that it has been a long journey and it is refreshing to take to heart in the City's efforts at sustainability. Jenna Ide notes that those Cities that have more than one person dedicated to sustainability are typically larger than Salem.

Guest Speaker: Wayne Castonguay, Executive Director, Ipswich River Watershed Association, "Sustainable Water Use Management and Climate Resiliency Planning for a Stressed River"

John Hayes introduces Wayne Castonguay, who has been Executive Director since 2012. Before that, he was with the Trustees of Reservations for 14 years.

Mr. Castonguay is impressed with SERC.

- He would like to increase awareness of "most endangered river status."
- How to advance water and sustainability efforts in Salem, Beverly and on the North Shore.
- Ipswich River Watershed Association – description and outline of work
- 5 programmatic areas of focus
- Advocacy: policy and behavior changes, mostly through partnerships. "Most endangered river" in all of America designation received in April 2021. Hoping that designation can motivate the public
 - Focusing on residents, Cities & Towns (may be in opposition to efforts), and State Policy
- Two primary drivers of Ipswich River low-flow problems:
 - Inefficient and discretionary water use (lawns, leaks, wasting water, not needed for everyday use). 50% of water coming out in August goes on lawns
 - Water exports outside the basin. If we used it and put it back into the watershed, we would have no problem. In summertime, most of the flow of Ipswich River goes into Lynn, Boston and Salem Harbors, not Ipswich Harbor. It is diverted South into the ocean
- Municipal water withdraws is shown, in Millions of Gallons per Day (MGD)
- Groundwater is the lifeblood of the river, so even though Ipswich, Lynnfield Center, etc. don't use as much, they have a larger impact than it seems
- Beverly/Salem water supply sources are shown: Putnamville Reservoir, Wenham Canal, Longham Reservoir, Wenham Lake. All are "pump storage;" can take from river in 6 months during winter and store for summer use. Beverly/Salem use 11.5 million gpd.
- Climate Risks to Ipswich River:
 - Water Energy Nexus: 13% of US Energy consumption. Pumping, treating, moving wastewater is 4th largest energy use in our country. Saving water will positively impact climate
- **Mass. Water Management Act 1986.** Prior to 1986, there was no regulation.
 - Regulates water withdrawals over 100,000 gpd so mainly impacts Cities and towns, golf courses, industry, some large farms



- Existing withdrawals before 1986 grandfathered through “registrations.” MOST were *before* 1986
- New permits only applied to *increased* water after 1986
- Safe Yield for each river basin was established; Ipswich River’s SY is exceeded. We have to live within our water allocations forever, there is no more water for Salem, this has future ramifications
- State can impose conditions on withdrawal permits but not on registrations. Many are below threshold of 100K gpd so 90% of water withdrawn from river is exempt from any regulations
- Town Water Restrictions exist in the Ipswich Watershed. Salem and Beverly have NO restrictions on water use
- Inequity between communities is a dire issue. Salem/Beverly exempt but Ipswich/Danvers are not, and this is detrimental to them
- Droughts of 2016 and 2020: two lowest flows in recorded history (past 100 years). 2020 was a “flash” drought while 2016 was ongoing
- Solution: **Water conservation**
 - “First resort” water source
 - Cost effective
 - Practical
 - Can avoid infrastructure expansion costs and environmental impacts
 - Reducing summer demand is key
 - Among highest cost-benefit to reduce carbon footprint
 - Large savings have been achieved when motivation to save has been strong
- Solution: **Conditioning Registrations**
 - Beverly and Salem actively fighting this, but after 30 years we have gotten DEP to condition registrations, but only temporarily after the last 2 droughts. W/out conditioning registrations, there is no sense in doing anything since they make up 80% of use
 - Promulgated Draft regs, during droughts, public hearings July 7 and 21
 - Ipswich is advocating for stronger conditions; state is proposing bare minimum. Ipswich is proposing conditions in stressed rivers proactively, not once the cat is out of the bag. I.e., all discretionary water use should stop
- Net Zero Water Use Policy: Mayors Driscoll and Cahill summoned him after Draft Regs put out b/c Salem & Beverly water boards asked them to fight the regulations. Will we have enough water for the future with the primary goal of increasing housing, particularly affordable? You can have your cake and eat it too. With a water resiliency toolkit, you can grow w/out increasing water demand, and can even lessen water use
 - In Ipswich, the most proactive community re water conservation, when the net zero policy is implemented, it will reduce water use by 14%
 - Goes back to reducing discretionary water use
- How to help: Become a member, participate in Most Endangered River campaign, join paddle-a-thon (past, June 18 2021, 2022 date TBD)
- Seeking recommendations as to how to get City of Salem to implement basic water conservation measures



John Hayes asks for a deeper explanation of conditioned registrations

- Salem and Beverly grandfathered to 12 million gallons per day, don't have to do anything. State would limit discretionary water use only during droughts, a baby step. Would limit lawn watering to at night, or if in severe drought, to one day per week, or fix accessible leaks. Nothing to do with necessary water use. IRWA is advocating they do it beyond only droughts but still limiting any changes to discretionary use
- Is there a wide range of how water is priced across the watershed? Every City and Town in NE does its own thing re water pricing. Gold standard would be seasonal water rates, which are price elastic, but problem is you need to bill monthly. Only 2 towns do this, most are quarterly or some semi-annually. Water rates in Ipswich River tend to be lowest in MA b/c of grandfathering and large sources. Salem's water rates are very low compared to most of the state
- Salem and Beverly are members of Greenscapes Coalition, so all water conservation services are provided to the communities. Implementation of measures would thus be free
- John Hayes notes that, like a "carbon footprint," a "water footprint" of the amount of water that goes into our goods and services would be helpful, along with noting water pricing and water conservation measures

Jeff Cohen:

- As a city, the problem is behavioral. The cost of a resource impacts people depending on their income level, more affluent are impacted less. For example, went to automated waste bins, and reduced how much a household could put out in trash. A 40% reduction in trash occurred due to smaller bins, but there was a lot of pushback at first
- This is cultural, we are conditioned to think big, green yards are beautiful
- Public education re impact of their uses is key. No one he knows is concerned about water conservation. We need to get people to start thinking: parks we have in Salem, do they need to be all grass, does Common need sprinklers going even when it's raining?
- Behavioral change is a sea change – thought processes must be changed
- John Hayes agrees that Salem residents do not think about their water, and this is b/c of quarterly water bill that lists usage in thousands of cubic feet – indecipherable to the average resident. Changing this would be a small but vital step toward water consumption literacy

Jenna Ide:

- Notes her background in water conservation
- Department will be doing outreach and engagement, would like to work with IRWA to address water conservation messages
- For Salem, messaging must be for our City. Boxford is 10th highest median income in state, Salem is at 170, Beverly at 150
- There are giant estates, polo grounds to the North, while for years Salem has had a gas plant, sewer plant, and affordable housing, but the message is "you are using too much."



- We invested in water, message must be more positive for Salem and Beverly, not just the why it's good (save money, save water). She does not see a lot of people irrigating, but most people live in apartments and condos or have minimal green spaces. Messaging must be targeted to who we want to talk to and what we want them to do. Beverly and Salem are similar
- She is an advocate of pricing but for a family of 4, low income, in an apartment, water and sewer rates hit them hard. A \$25 increase in water bill is a lot for some
- We are taking from the winter high load, and we are not pumping back to people if we don't use it (or are we)? Who are we trying to convince, what is our message, how do we get them on board, what's in it for Beverly/Salem residents? Other than that they value the river, which of course people do. If we don't use the water, it doesn't go back to replenish the river (water in reservoirs)?

Rick Nye:

- If we restrict how much we pull out, reservoir will not be as full. Jenna: isn't the end of the river the bay, by pulling a portion of it, will it stay in the summer if we don't?
- We draw during the winter months. How much of discretionary use is through leaks vs. watering lawns? Can Salem explore leak repair?
 - Mr. Castonguay notes that there used to be 30% leakage rate 15 years ago, now a 10% leakage rate.

Mr. Castonguay:

- Jenna's point is the crux of the problem. From a regional perspective, we need Salem and Beverly to help but there is nothing "in it" for the residents. The inequity [lack of restrictions in Salem and Beverly] across towns makes it untenable for other towns to comply w/restrictions. Some have complete water bans but since neighbors have no restrictions it does not seem fair. The fact that Salem does not have to conserve makes others not comply
- Drawing from groundwater is a problem and stored water is preferable. If Beverly and Salem had standard conservation restrictions, it would free up enough stored water to supply Hamilton, Wenham, Danvers, Middleton, and Ipswich their summer water.
- Proposal is to regionalize and let all towns withdraw from reservoir, at least during dry periods. Salem and Beverly own the only shovel ready, pre-permitted new reservoir site in the state, we could build a new reservoir and get ALL communities off groundwater entirely

Jenna Ide:

- Recognition of investment. We may have low water rates, but they are still high. Saves you money if you use less, if you use it well, you and your plants are happier. Watersheds don't adhere to town boundaries
- Jeff Cohen notes that no one knows where we get our water from

Doug Bowker:



- Certain areas where people use groundwater directly, that feels like a loophole in the situation. Not just golf courses, but residents have multiple acres of land further north and west, and they usually look pretty green.
- That class of citizen will be well funded to fight and push back against being forced into acknowledging that water is not really free when it concerns a stressed system. Unsure of mechanism to address this.

John Hayes:

- Receptive to Jenna and Jeff's comments re household income, but data could be analyzed regarding "comparable cities" as it is for other environmental issues. Can look to cities w/similar environmental justice and income populations, and see what their pricing is for water, to compare apples to apples
- Data is available every 5 years via survey by Mass. DEP who consults with Tighe & Bond; Mr. Castonguay can put John in touch

Jeff Cohen commends John Haye's attempts to get the water bill formatting updated so residents can quantitatively assess how much water they are using.

Public Comment

Melissa Faulkner:

- Thanks the Committee for being actively involved, notes it is all about education and awareness. Looks forward to helping spread the knowledge. Grass is not greener, especially if you run out of water. Many people are disconnected from others. She is here to help, speak and advocate
- Rick Nye wonders if a one-page slide showing where our water comes from could be put in water bill to raise awareness? Mr. Castonguay would be happy to work with the City to design an insert. Jenna Ide: we will be doing outreach and engagement, can work with IRWA on this.

Doug Bowker:

- There will always be people who will change their behavior when they find out about something, and sometimes awareness is all it takes – awareness of a problem and knowing there is a simple solution/change they can make personally. This is one of those issues where individuals can have immediate impacts.

Wayne Castonguay will work on data requested.

Tackling Urban Heat in Selected LEED Cities (John Hayes)

Postponed to the July meeting.

Divesting from Fossil Fuels - [Boston Globe Article](#) (Jeff Cohen)

Jeff Cohen notes that Maine is divesting its entire retirement fund from fossil fuels. Massachusetts is trickier b/c there must be a state enabling act before individual communities can do the same thing. This should remain on the radar. People are realizing that they can



survive financially without investing in fossil fuels. Jenna Ide agrees that this is “a smart move,” and they will be stranded assets at some point. Shelley Alpern of SAFE does financial planning using sustainable investments.

John Hayes comments that this was a big issue at Salem State three years ago, and Salem State did eventually divest its portfolio from any fossil fuel stocks or bonds, and was a leader in New England.

City Projects

Forest River Update (Jenna Ide)

- Classroom/nature center is up, looks across the harbor. This is for everyone, not a private beach or residence.

General Municipal Update (Jenna Ide, Esmeralda Bisono, Stacy Kilb)

- Willows has started, will be done by November
- Bertram will be done soon. It and Willows have porous pavement
- Hoping to change how things are done in Salem; during sporting events, people bring in truckloads of plastic water bottles and then throw them out, not even recycling them. They do it out of love to make sure kids are drinking a lot, but we will have fountains and bottle fillers at Bertram. Need to think about how we deal with trash and food waste, these are opportunities for us to think differently and promote reusable water bottles, or at least get them to recycle
- Need to message this in an understanding way. We need to clarify that all our waste is being incinerated, then air pollution is raining down on us
- Fire station drainage improvements – wrapping up
- Artists Row restroom
- School Master Plan – in data phase, facilities/demographics/capital assets being explored to achieve proper investment. Schools have largest water, energy use, greenhouse gas emissions, food waste impacts. Must look toward next 20-30 years
- Emma Bird will be working on Green Building Ordinance, making it so legal sections are ready to go, municipal sections are separate
- John Hayes will send his email regarding water to Emma Bird so that can be included. Jenna Ide notes that all SERC members are a resource and that she can reach out to them

New Business

July speaker invitation
[Not discussed]

Upcoming Events

Next Meeting – Wednesday, July 28, 2021, at 6:30 P.M. Via Zoom



Jenna Ide notes we may consider doing a picnic, as has been done in the past. Possibly an outdoor gathering to announce the new department. Also, a HEAT one in July. Do at Forest River rather than at the Willows?

Adjournment

A motion to adjourn is made by Rick Nye, seconded by Doug Bowker, and passes unanimously.

The meeting ends at 8:00PM.

Know Your Rights Under the Open Meeting Law, M.G.L. c. 39 §23B, and City Ordinance Sections 2-2028 through 2-2033. Please contact Jenna Ide at jjide@saalem.com or 978-619-5699 for more information.

