Growth Planning Committee
Minutes
June 1, 2021

Attendees: Dan Saunders, Chair, Jim Fitzgerald, Vice-Chair, Paul Hogan, Werner Gilliam, Director of Planning and Development, Jim McMann, Janet Powell. Mike Corsie

Guests: Liz Durfee, Tom Morgan, Dr. Jane Knott

Dan Saunders, Chair, called the GPC meeting to order at 6:00PM. Following an introduction of the members of the Committee, Dan outlined the evening's agenda. Tom Morgan introduced Dr. Jane Knott, Research Associate at UMass, Boston and Principal at JFK Environmental Services LLC. Jane is a specialist in climate change adaptation and modeling of groundwater rise. We are grateful to Jane for her willingness to share with the community her expertise and explain how groundwater rise will affect the Southern Maine region based on the Durham, NH model.

The following are some of the key facts associated with Groundwater Rise caused by Sea-Level Rise and its impact

- Higher temperatures lead to more evaporation from the land and sea into the atmosphere. As air gets warmer, it holds on to more vapor, potentially leading to more intense rainstorms, flooding risks and increased water runoff in streams and rivers.
- Precipitation and rising temperatures trigger seasonal intensity which contributes to sea level rise/ groundwater rise
- GWR impacts infrastructure such as vulnerable roads where GW is less than 1.5 meters below the road surface and where water moves into underlying layers and weakens the asphalt construction.
- GWR can lead to groundwater contamination from saltwater intrusion, seepage from septic systems, leaks from hazardous waste sites such as landfills and leaks from storage tanks and pipes, wetland expansion and damage to historic buildings.
- Of particular concern is the age of the Town's sewer system (30-50 years old), half of the town has septic systems which pose a potential hazard to contamination of the Kenebunk and Little Rivers.

- Wetlands serving as plant and animal habitat are fragile ecosystems that provide sediment retention areas and significant cultural value. GRB, a barrier island, is at risk when salt water rises and displaces fresh water, jeopardizing wetland habitat.
- Our drinking water, 64% of which comes from the KKWWD is sourced from surface groundwater. Deep private wells are more vulnerable than shallow wells which are less likely to suffer saltwater intrusion.
- An **Adaptation Plan** should identify vulnerable roads and infrastructure, protect wetland expansion and consider changing these buffer zones. A regional analysis of GW changes including that of the neighboring communities of Biddeford, Kennebunk, Wells and Arundel is highly recommended.

Q&A

1. **How can I determine the depth of my water table?** JK Considerations/Are you near a stream or a wetland?/ Gain information about your property by checking with your neighbor to see the depth of their well.
2. **How soon will we see GWR?** JK Modeling will inform but it depends on your geology/GWR will never rise more than Sea Level as you move inland. WG- the depth limiting factor should tell you how deep the table is. Check records/ types of soil are also an indicator.
3. **How can a resident tell if their neighbor's SS is failing?** JK Monitor the gw level on property/check records to see how deep the system is/another indicator is the smell and or wet ground
4. **Are there any plans for sewers in Biddeford Pool?** WG- no info
5. **The Fire Station at GRB had salt in their water. Is that an indicator of the depth of**
6. **their well?** JK Near the coast, the more shallow the well, the safer it is. A deeper well will be affected by salt water sooner at the same distance from the coast.
7. **What is the feasibility of modeling a new well? If the town were to do one, would it be available to the public?** JK If it is for public use and can be partially funded by the state, it is well worth the considerable expense, as it answers many questions. From a cost-sharing perspective, a regional model would make sense.
8. **How much does it cost to connect to the sewer line in GRB?** WG- Impact fees plus annual taxes/there are site constraints re: distance to hook up/if there is frontage on the line, $5-10,000. Contact the sewer dept for specific info and cost.
9. **Is modeling being tested in real life?** JK Yes. In Truro (Cape Cod) The US Geological Survey found a similar model of GW rise as that in Durham.

10. **What is the primary cost for modeling?**JK Software is free/ it is the labor and the collection of data over time that is expensive.
11. **Do the designers of septic systems know the GW levels near the coast?** WG Site evaluation includes test pits looking for the depth limiting factor, gathering soil types and within state criteria, design by soil types and flow. What if the town needed to evaluate subsurface code? The town uses peer review or state guidelines but not typically for private residences. Data comes from existing wells/ LAIDR technology. ™-Some areas of town are buildable today but may not be in the future. LD- Taking a cue from the wetlands, buffers near the wetlands may guide the future development in a community.
12. **How did Durham decide on 8 ft sea level rise beyond 2100?** TM Modeling. However, Maine Climate Council wanted to extend their number to 8.8ft.by 2100

Following the Q&A, Dan thanked Dr Knott for her informative presentation. Any subsequent questions from the public related to this evening's presentation will be addressed to the appropriate source for answers.

Dan reminded everyone that the SWOT session will be held on 7/26. Additional details will be updated regularly on the CP website. He extended a thank you to all of the residents for watching, stressed how important the public's input is to the process of creating a Comp Plan, and invited all to continue to participate in the surveys posted on the site.

With no further business or discussion, Jim Fitzgerald made a motion to adjourn, Paul Hogan seconded.
The meeting was adjourned at 7:42 P.M.
Next GPC meeting is on 6/15 at 6:00 P.M.

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