Environmental Impacts

1. If the water treatment plant is constructed on the Stearns Meadow site will the entire 15-acre site be clearcut?

No, the entire property will not be clearcut. There will be a minimum 30-foot buffer between the abutting residents and the water treatment plant. The current conceptual design includes a 75-foot buffer. As design progresses, the buffer will be maximized to the extent feasible and additional plantings will be considered to shield the abutting residents from the water treatment plant and all associated activities on the site.

2. Will the construction of the water treatment plant on the Stearns Meadow site negatively impact Tack Factory Pond and the Reservoir as a water resource?

The water department is a major stakeholder in protecting Tack Factory Pond and the Reservoir from pollution. Collection systems will be designed to prevent any runoff from onsite operations into the Reservoir. Ensuring the safety of our Reservoir is one of the water department's highest priorities.

3. Are there any rare or endangered species of wildlife with habitats on the Stearns Meadow site?

The Natural Heritage and Endangered Species Program has not identified any priority habitats of rare species or wildlife on the Stearns Meadow site. Additional investigations into potential rare or endangered species will be conducted as required by regulations.

5. Will the construction of the new water treatment plant on the Stearns Meadow site result in a loss of wetlands?

The site layout will make every attempt to minimize the effect on the wetlands within the Stearns Meadow site. Construction on the OOB water treatment plant site will result in greater wetland and wetland buffer disturbance as compared to the Stearns Meadow site. Any wetland disturbance will be addressed during the permitting process.

6. Will the construction of the new water treatment plant on the Stearns Meadow site result in increased wind effects for abutting residences?

The design team evaluated meteorological conditions from a nearby National Weather Service (NWS) observation station for the past three years (2019 – 2021). The majority of wind flows are from the southwest (blowing towards the northeast) and these flows will not be affected by land-use changes at the Stearns Meadow site. Winds from the southeast (blowing towards the northwest) are infrequent and typically lighter than the dominant wind flows.

Given the proposed land use changes, it is anticipated that the replacement of largely deciduous trees with permanent structures would serve to interrupt the southeasterlies to a greater extent, and with the retention of a treeline between the residences and the permanent structures, it is likely that any modification of the relatively infrequent light southeasterlies would be interrupted by the remaining treeline.