

From: liam57@charter.net
To: [CSC-DL Siting Council](#)
Subject: Sherman Conservation Commission Regarding Cell Tower Proposal on Coote Hill
Date: Tuesday, March 16, 2021 5:29:22 PM
Attachments: [Proposed Cell Tower - 16 Coote Hill Rd - Sherman Conservation Commission Input.pdf](#)

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Greetings,

Attached is a correspondence from the Sherman Conservation Commission regarding a pending proposal to construct a cell tower at 16 Coote Hill Road in Sherman, CT.

This communication details our commission's concerns of the project's environmental impacts at the site and surrounding area. It also includes some suggested recommendations.

The attachment is in pdf format. Please let me know if you would prefer us to send you the original PowerPoint document. We have mailed a hard copy of the attached to your council as well.

Please let me know if you need any additional information. Thank you.

Regards,
William S. McCann
Chairman
Sherman Conservation Commission



View of Coote Hill Rd area from Route 37, Sherman, CT

**TO: CONNECTICUT SITING COUNCIL
ATTENTION: MELANIE BACHMAN, EXECUTIVE DIRECTOR
FROM: SHERMAN CONSERVATION COMMISSION, TOWN OF SHERMAN, CT
RE: ASSESSMENT OF PROPOSED CELL TOWER - 16 COOTE HILL RD, SHERMAN, CT**

March 10, 2021

Dear Ms Bachman,

As residents of Sherman and dedicated members of our town's Conservation Commission, we have major concerns regarding the proposed installation of a cell tower at 16 Coote Hill Road in Sherman, CT.

While we are not soil specialists or civil engineers, our collective research and experience as Sherman land owners informs our view—a view that construction on this parcel will create significant and costly environmental issues.

The removal of 124 trees from this sloping, rocky site to construct a 12' wide access gravel drive approximately 1,900' long and a tower compound has the potential of creating and/or worsening sediment and erosion issues, both during and for an indefinite period after construction.

Sediment and erosion issues generally lead to decreases in quality of the water and wildlife habitats and may well affect this site's extensive wetlands. Water quality of nearby homeowners' private wells, Lake Mauweehoo, Pepper Pond and feeder streams and other water bodies comprising this area's watershed may be affected for years to come.

The increasing frequency of intense storms in recent years, and the high levels of precipitation and wind speeds they unleash, are another concern. These storms are an almost yearly occurrence now and will only add to erosion risks. Also, the declining health of our state's trees, exacerbated by recent severe droughts and attacks by invasive insects will result in even fewer trees on the proposed project site to buffer winds and precipitation.

We recommend, based on these concerns, that the Siting Council undertake a thorough, independent environmental impact review of this proposed project before making a final decision on its viability. We further recommend that a rigorous Low Impact Development (LID) plan, an increasingly common approach to stormwater management, be developed and implemented, with qualified independent review of the LID plan and its implementation, with yearly follow-ups for a period of 5 years.

Respectfully,

Sherman Conservation Commission



Memory Lane Farm with Coote Hill Rising Behind the Barn

THE SOIL-TREE LINK

SOIL SERIES 73C
- makes up majority of construction zone;
has up to 15% slopes;
slopes lead to erosion.

SOIL SERIES 3
- wetlands; appears new access road will parallel portion of sensitive wetland that may not be able to absorb runoff from new road and surfaces exposed by tree removal.



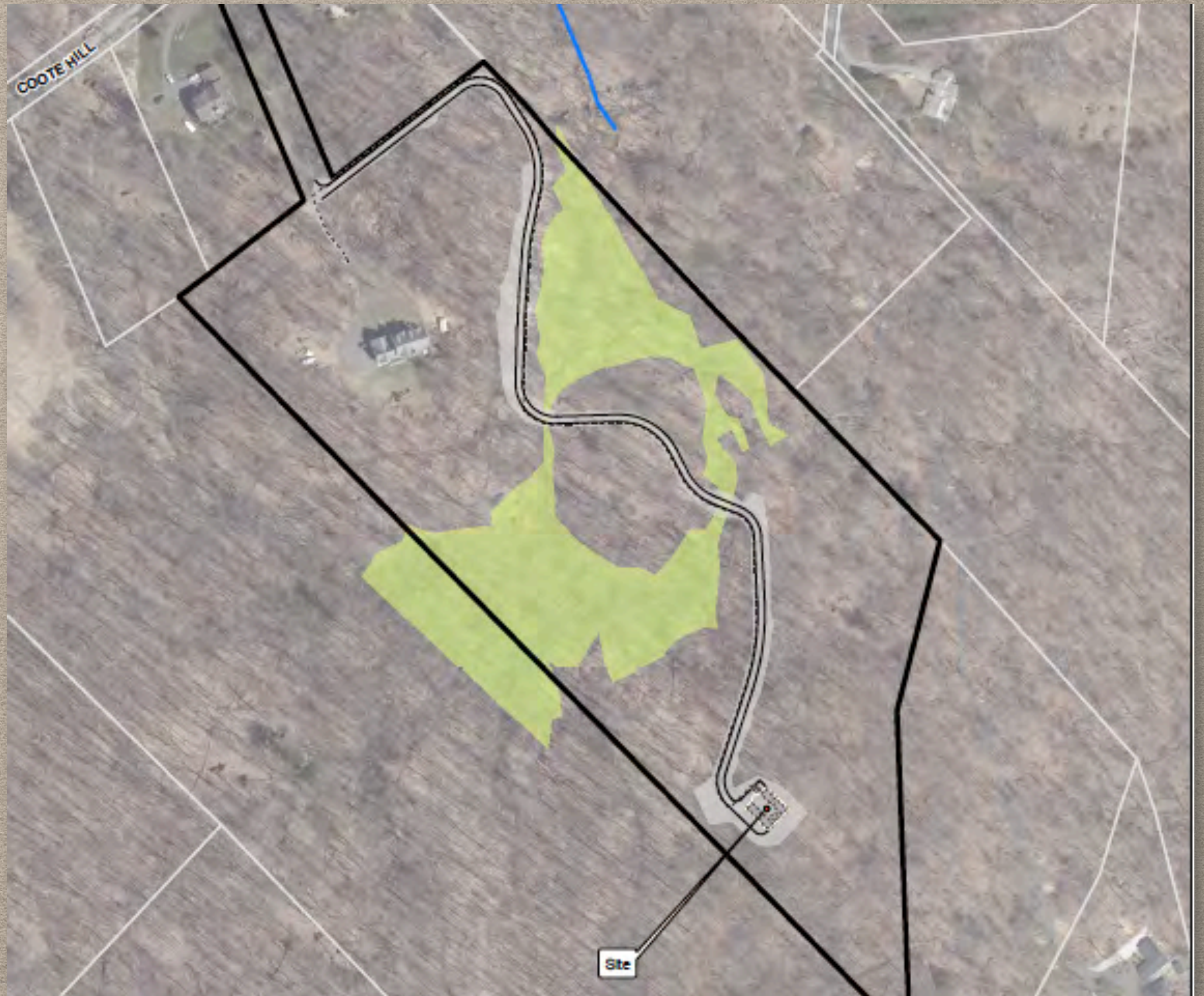
THE SOILS & TREE LINK

AERIAL SITE LOCATION MAP, SOURCE: HOMELAND TOWERS PROPOSAL

GREEN AREAS -
SIGNIFICANT WETLANDS

DARKER GRAY MARKINGS -
TREED AREAS

*-124 trees to be removed
-1/3 of them are larger caliper,
therefore have larger canopies
and root systems to slow,
absorb and release
precipitation.*



TREE IMPACTS ON HYDROLOGY AND WATER QUALITY

SOURCE: [HTTPS://LAWR.UCDAVIS.EDU/CLASSES/SSC219/BIOGEO/THROUGH.HTM](https://lawr.ucdavis.edu/classes/ssc219/biogeo/through.htm)

“Generally, 10-35% of the annual precipitation is intercepted by the canopy. For an individual precipitation event, the amount of interception depends on the intensity and duration of the event.

“In non-urban environments, soil infiltration rates under tree canopy were 50% higher than outside the canopy (Mlambo et al. 2005), while deforestation or forest burning decreased infiltration rates by 20-35% (Wondzell and King 2003; Lal 1996).”

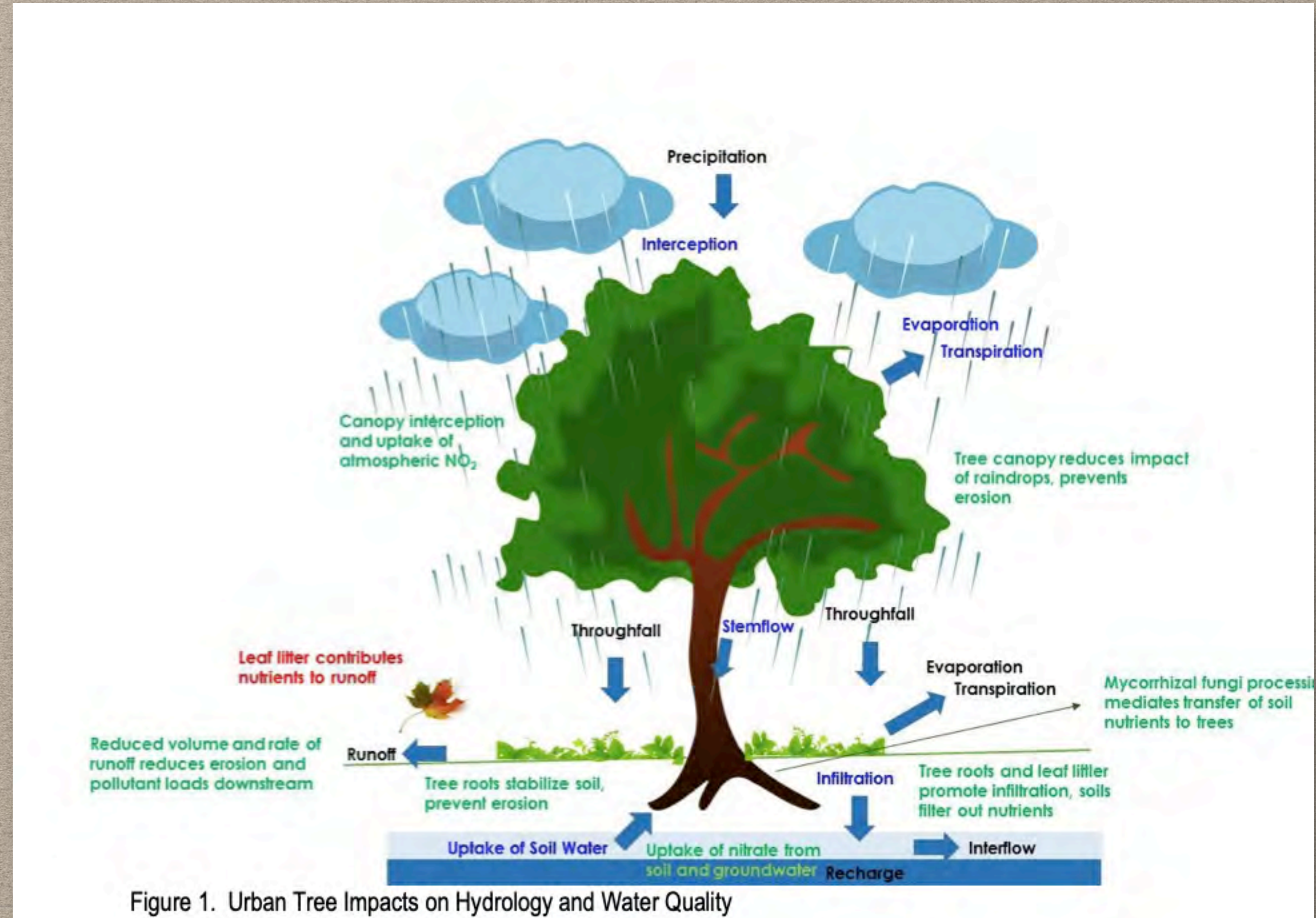


Figure 1. Urban Tree Impacts on Hydrology and Water Quality

SEDIMENT AND EROSION ISSUES

ENVIRONMENTAL PROTECTION AGENCY (EPA) GUIDANCE

[Source](#): "Erosion and Sediment Control Model Ordinance"

[Source](#): Suggested template for compliance monitoring

The Homeland Tower's proposal states: "Total area of disturbance is **70,000± sf.** (1.6± ac.)."

- EPA guidance suggests this is an area 7 times larger than the 10,000 sf that would trigger the need for a developer to provide an Erosion and Sediment Control Plan.

Section I. Introduction/ Purpose

During the construction process, soil is highly vulnerable to erosion by wind and water. Eroded soil endangers water resources by reducing water quality and causing the siltation of aquatic habitat for fish and other desirable species. Eroded soil also **necessitates repair of sewers and ditches and the dredging of lakes.** In addition, **clearing and grading** during construction **cause the loss of native vegetation necessary for terrestrial and aquatic habitat.**

Section III - Permits

"No person shall be granted a site development permit for land-disturbing activity that would require the uncovering of 10,000 or more square feet without the approval of an Erosion and Sediment Control Plan by ([monitoring agency]) "

LOW IMPACT DEVELOPMENT (LID) / GREEN INFRASTRUCTURE VS TRADITIONAL STORMWATER MANAGEMENT

Due to the extensive wetlands on the proposed construction site, a LID approach is recommended to preserve water and natural habitat quality.

LID - addresses stormwater near or at source

Traditional Stormwater management - directs and pipes water to offsite location

"Low impact development strategies used careful site design and decentralized Stormwater management to reduce the environmental footprint of new growth. This approach improves water quality, minimizes the need for expensive pipe-and-pond stormwater systems, and creates more attractive developments."

Source: Massachusetts Low Impact Development Toolkit

LOW IMPACT DEVELOPMENT (LID) PRINCIPLES

SOURCE: "LOW IMPACT DEVELOPMENT APPENDIX TO THE CONNECTICUT STORMWATER QUALITY MANUAL" DATED AUG 2011, BY FUSS & O'NEILL, MANCHESTER, CT

"Perhaps the most potentially destructive stage in land development is the preparation of a site for building –clearing of vegetation and soil grading (Schueler, 1995)."

2.2.3 Step 3 - Optimize Conservation of Natural Features

"Natural features are saved to reduce impacts and allow for greater use of natural features to treat runoff. Conserving natural features not only reduces impacts but preserves habitat and natural ecological processes to be used for stormwater controls...**The greater use of natural features generally means reduction of clearing and grading and lower cost.**"

2.2.4 Step 4 - Minimize Impacts at the Lot Level

"There are many lot level techniques that should be considered including:

- Restricting ground disturbance to the smallest possible area.
[Note: Homeland Tower proposal states a 70,000 square foot area of disturbance.]
- Reducing paving.
- Avoiding removal of existing trees.
- Locating structures, roadways on Type C soils where feasible."

[Note: NRCS Soil data indicates majority Type B soil at proposed project site, less ideal for roadways.]

SHARP RISE IN "INTENSE" PRECIPITATION IN CT

INTENSE EVENTS

2011-Aug-28 Tropical Storm Irene*

2011-Oct-29 Snowtober Nor'easter

2012-Oct-29 Hurricane Sandy

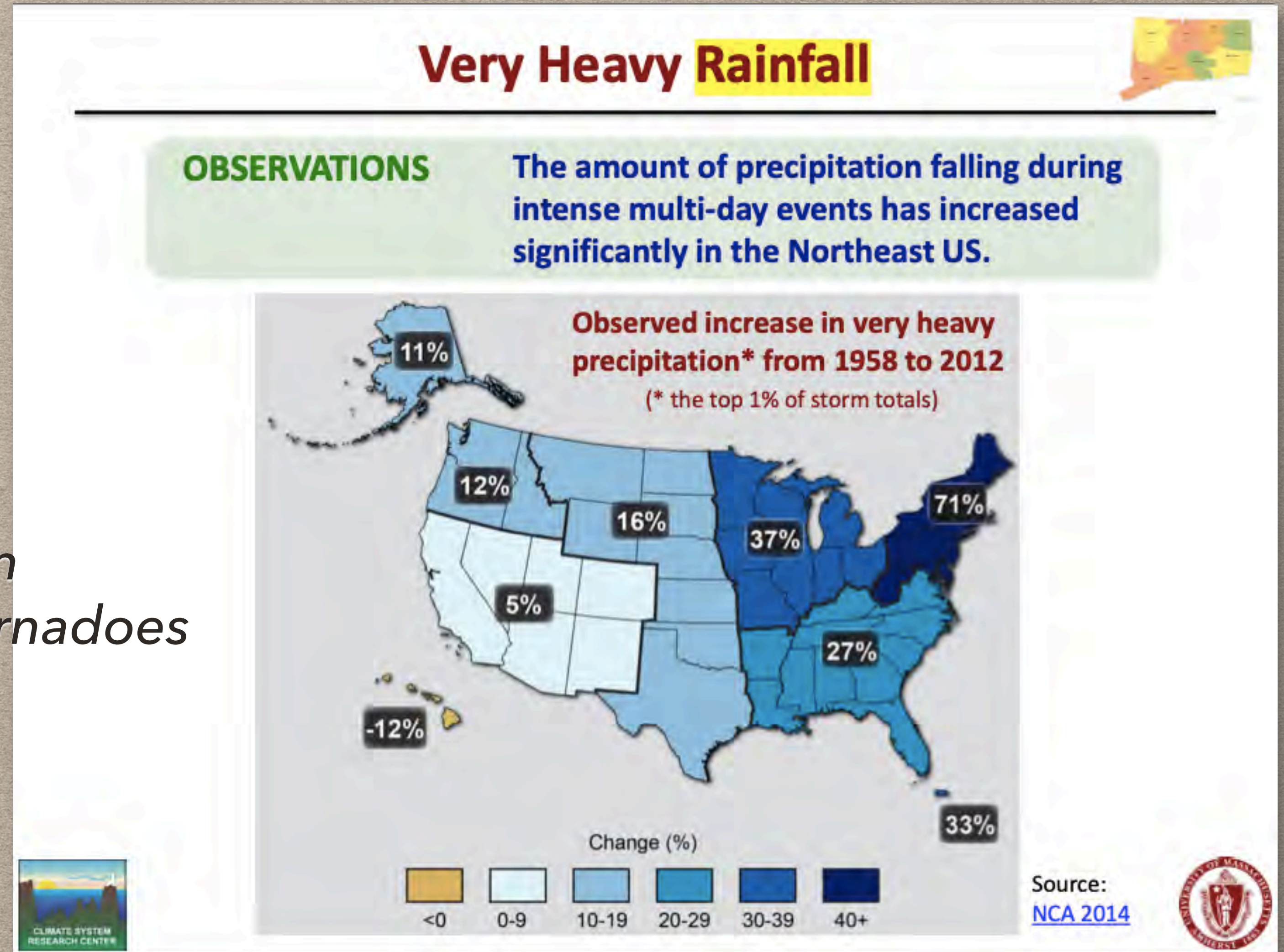
2013-Feb 8-9 Blizzard

2017-Oct 29 Southeaster wind storm

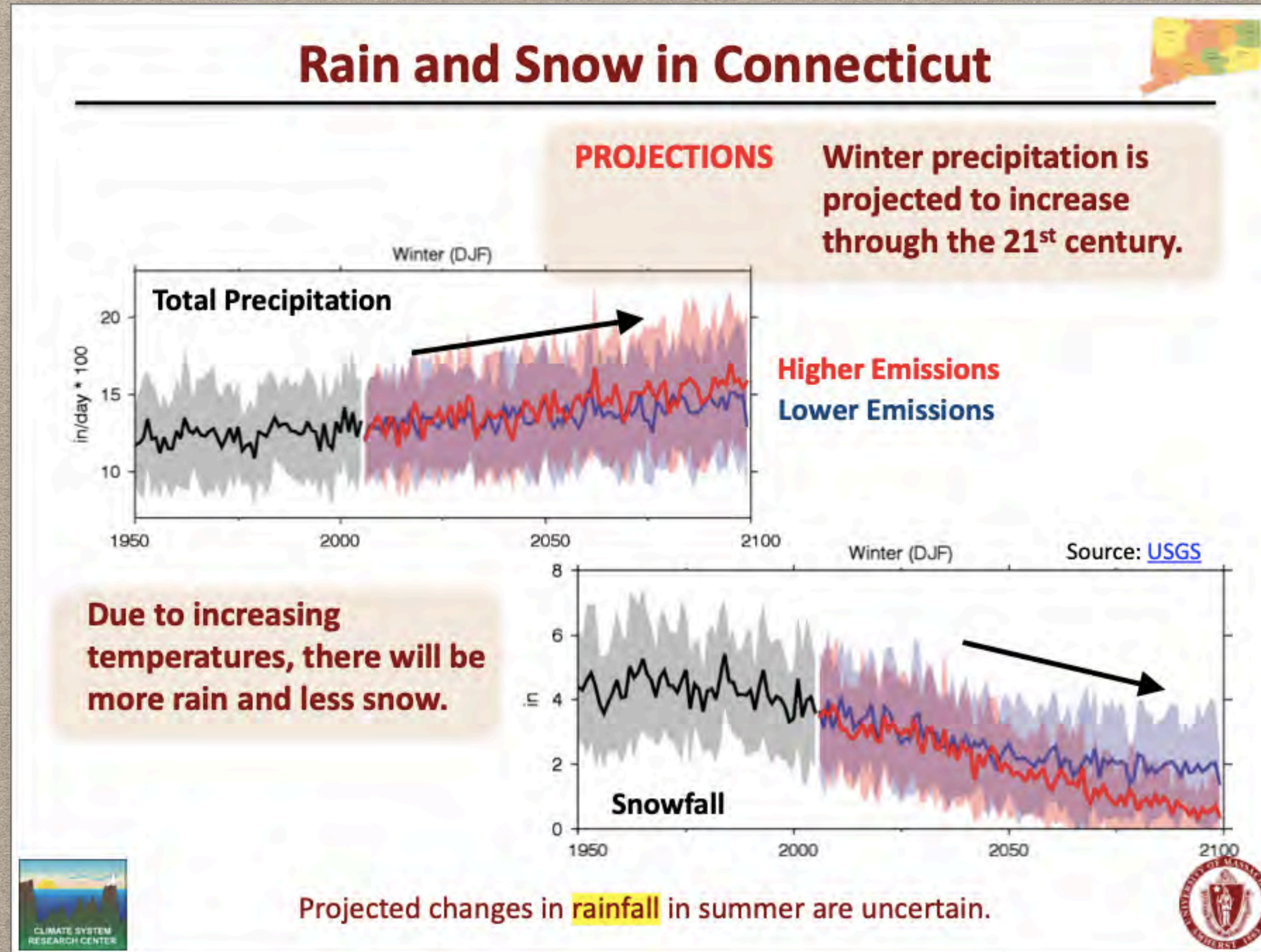
2018-May-15 Macroburst & Four Tornadoes

2020-Aug-04 Hurricane Isaias

*significant road & bridge damage in VT where 12 bridges washed out



MORE RAIN, LESS SNOW IN WINTER WHEN... MORE RUNOFF RESULTS DUE TO FROZEN GROUND



ADDITIONAL REFERENCES

Note: Stormwater management literature often refers to urban settings, but same benefits apply in rural areas.

Massachusetts Low Impact Development Toolkit –
<https://cfpub.epa.gov/npstbx/files/BioretenctionLIDFactsheet.pdf>

The Sustainable Sites Initiative – <http://www.sustainablesites.org>

Greening the Backyard: Water Efficiency and Stormwater Solutions for Homeowners and Communities
– <https://youtu.be/WOMLB2kLYVA>

Other references:

Millions Of Connecticut Trees Are Dying. What's Killing Them? – <https://www.courant.com/news/connecticut/hc-news-tree-killers-20180926-story.html>

IN CLOSING...

The proposed cell tower poses considerable environmental concern due to...

...the quantity of trees to be removed and the topography of the site

...combined with the extensive size of construction disturbance

...leading to increased sediment and erosion issues

...at a time when intense precipitation events are expected to continue and worsen.

Therefore, the Sherman Conservation Commission respectfully recommends:

- The need for an independent environmental impact review of this proposed project before making a final decision on its viability.
- Should approval be granted, the commission further recommends development and implementation of a rigorous Low Impact Development (LID) plan, an increasingly common approach to stormwater management in Connecticut.
- Further, the LID plan and its implementation should be subject to qualified independent review with yearly follow-ups for a period of 5 years.
- Finally, we recommend that the site developer should include a decommissioning plan with a description of methods to be used for the dismantling and removal of equipment and structures at the end of their useful life or when they are no longer needed. This plan should also include assurance of funding for the decommissioning.

**“When we try to pick out anything by itself,
we find it hitched to everything else in the universe.”**

John Muir - Founder, Sierra Club



*View of Lake Mauweehoo in winter with Coote Hill in the background;
one of several nearby water bodies that may deteriorate if groundwater quality is negatively affected by cell tower construction.*

Questions:

Contact William McCann,
Chair - Sherman Conservation Commission

liam57@charter.net