# Incentivizing Road Stormwater Infrastructure on Private Land

By Olivia Matthews

# Transportation Resilience

• Stormwater runoff and flooding.

• Copenhagen pioneer in water

management







#### Gaining Insight

- Better Roads Program
- Municipal Roads General Permit
- Dr. Beverley Wemple
  - Green infrastructure
  - Runoff from private land



### Goals for Study Committee

- 1. Establish stakeholder involvement throughout the process
- 2. Determine what are the most effective & monetarily efficient types of road stormwater infrastructure
- 3. Calculate total cost of installations, determine a monetary value of grant, avenues for funding
- 4. Study committee designates a state agency that will be responsible for creating pilot program
  - 1. Over 2 years install 4 road stormwater infrastructure
- 5. Study committee designates a state agency that creates a proposal for a state-wide incentive program for private land owners.



### Barriers

- Funding
  - Resources necessary for study committee and pilot program
- Gaining private land owner support
  - Personal responsibilities, property taxes, poverty
  - Underscores importance of stakeholder involvement
- There are already acts in place to address stormwater runoff and flooding
  - Without addressing runoff from private roads, time, effort, money from MRGP will be for naught



# Conclusion

• Vermont can continue to be pioneer in addressing climate change

- Better Roads Program & MRGP
- Study committee research financial incentives for land owners who install road stormwater infrastructure
- Goal- how to create effective policy that incentivizes reduction of stormwater runoff and flooding

### References

- De Smedt, J. (2018). KAL-proj-01 [photograph]. JDS Architects. Retrieved from http://jdsa.eu/kal/#
- French, E. (2019, April 15). Heavy flooding reported in central, southern Vermont. Retrieved from <u>https://vtdigger.org/2019/04/15/heavy-flooding-reported-central-southern-vermont/</u>
- Ryan, J. (2019). DEC's municipal roads general permit. [PowerPoint]. Retrieved from <u>https://dec.vermont.gov/sites/dec/files/wsm/stormwater/docs/Permitinformation/MunicipalRoads/sw\_M</u> <u>RGP\_PublicMeetingsPresentation.pdf</u>
- University of Vermont. (2019). College of Arts and Sciences. Retrieved from https://www.uvm.edu/cas/geography/profiles/beverley-c-wemple
- Vermont Agency of Transportation. (2015). Better back roads program review. Retrieved from <u>https://vtrans.vermont.gov/sites/aot/files/highway/documents/ltf/FINAL%20Better%20Back%20Roads%20</u> <u>Program%20Review.pdf</u>
- Photo by <u>Samuel Zeller</u> on <u>Unsplash</u>
- Photo by Jamie Street on Unsplash