

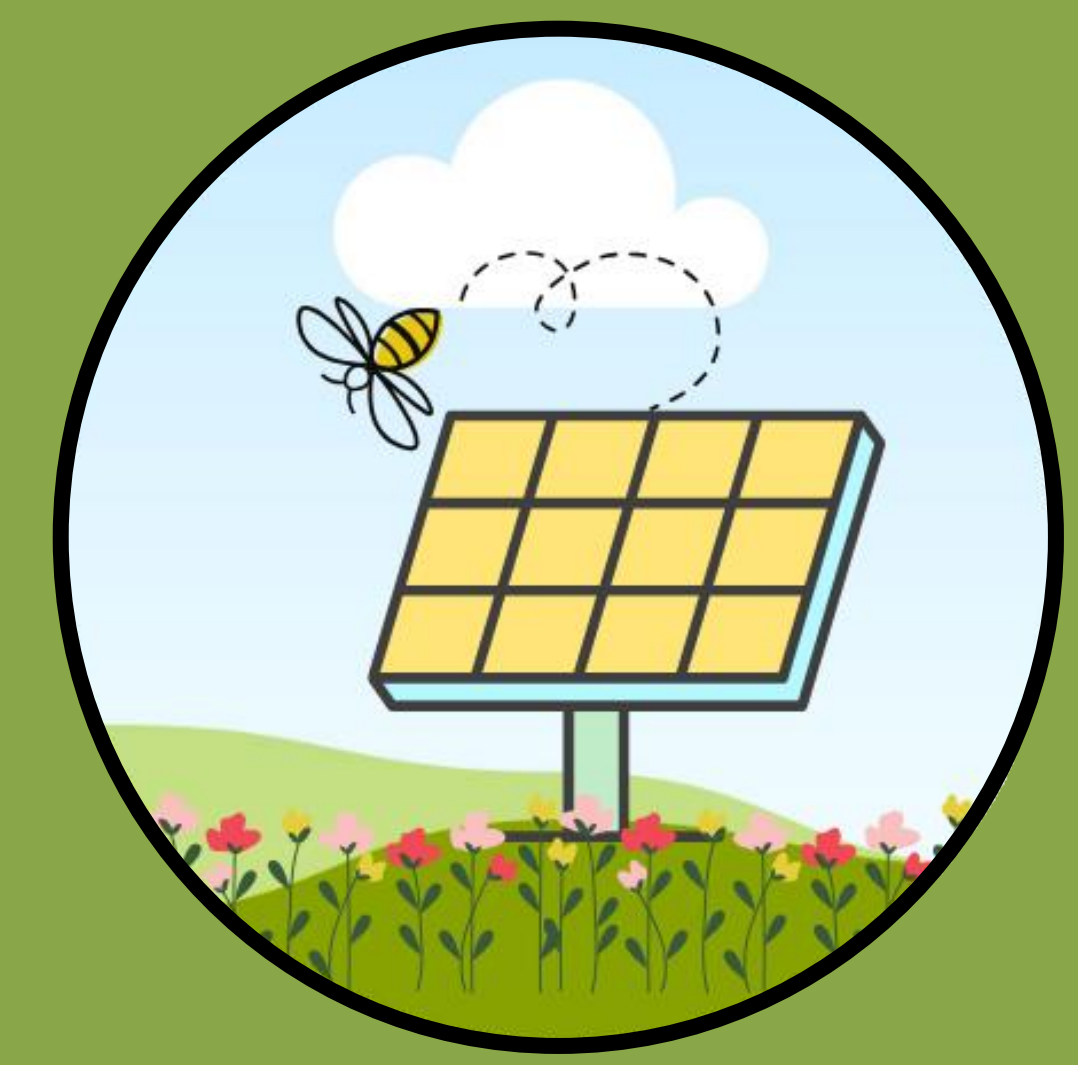


WPI

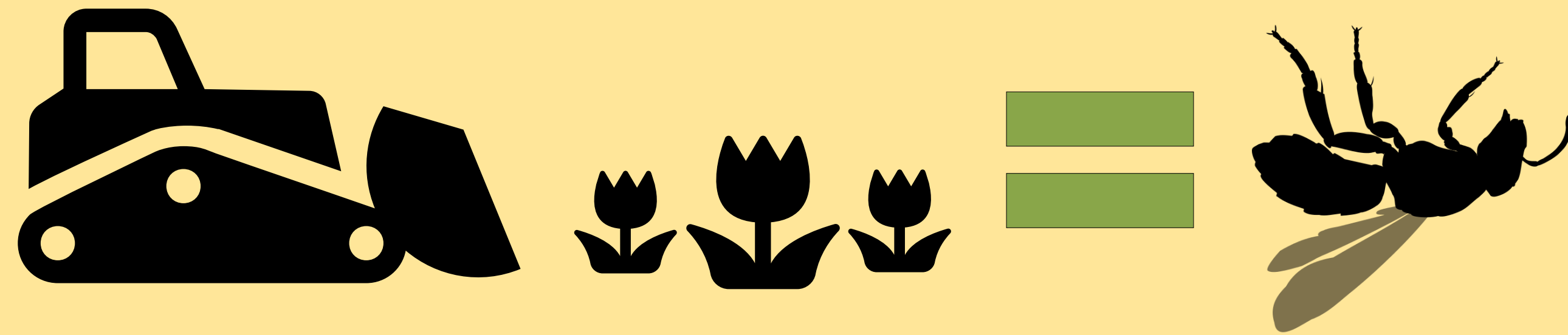
Pollinator Positive Panels

Emma Pruitt, Megan Hanlon, Daniel Zhao

Advisors: Dr. Geoff Pfeifer, Dr. Derren Rosbach

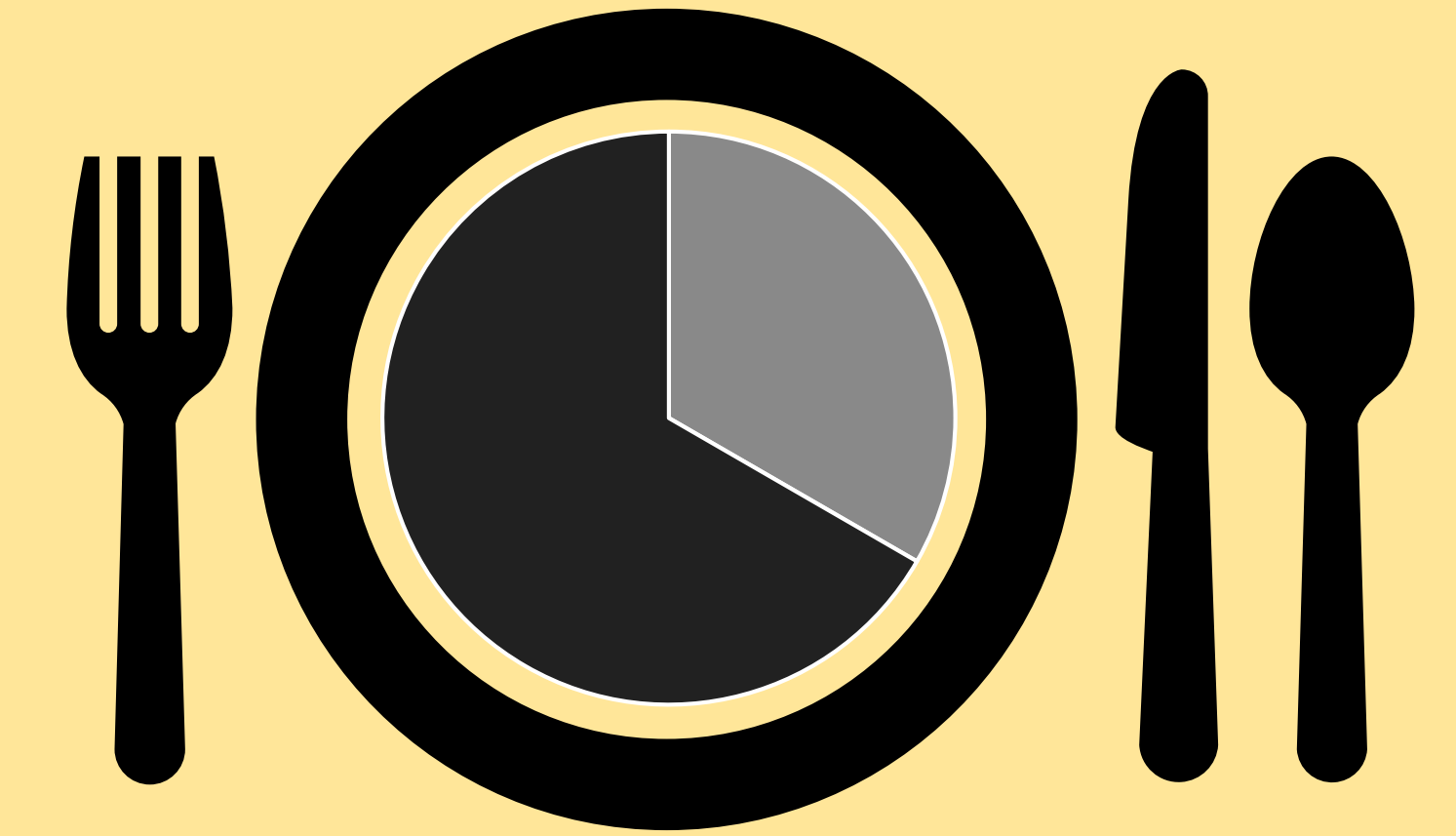


Problem:



1/3

of the world's food production is dependent upon pollinators



Solution:

Rehabilitate the populations of threatened native pollinators affected by habitat loss in Massachusetts by integrating pollinator habitat on solar farms



Benefits:

50%

more pollinators visit solar farms with native wildflower landscaping

100%

return on investment in the first three years of replanting

\$6.6 billion

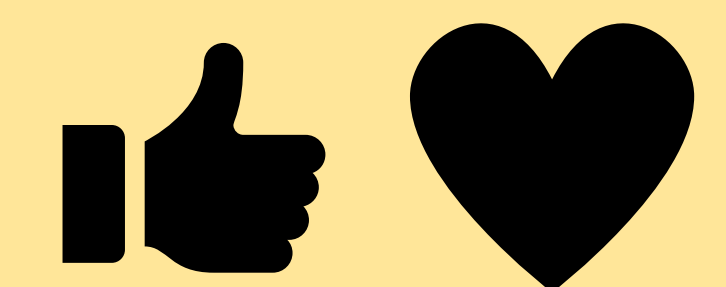
have been invested in solar projects in Massachusetts

Implementation:

Locally establish guidelines and expectations similar to those in Minnesota



Use social media to raise public awareness, interest, and participation

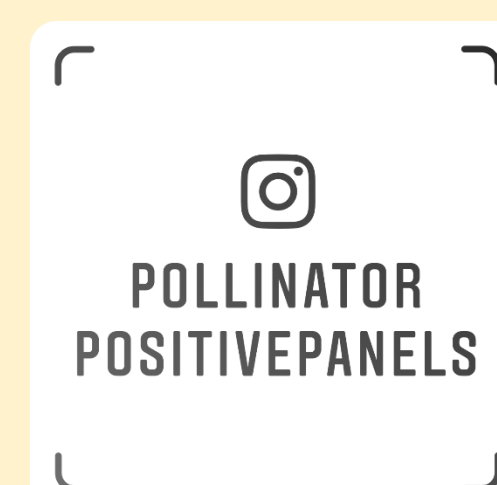


References

Bee insect drawing [Photograph]. Retrieved from www.needpix.com/photo/23395/bee-insect-drawing-flying-wings-isolated-honeybee-keeping-pollinate
Broussard, M. (2016). Halictus rubicundus silhouette [Photograph]. Retrieved from en.wikipedia.org/wiki/File:Halictus_rubicundus_silhouette.svg
Dandelion plant weed [Photograph]. Retrieved from www.needpix.com/photo/29951/dandelion-plant-weed-edible-flowers-leaves-stems-yellow-flowers-flowering
Davis, R. (2016, March 17). Green landscapes on solar sites-an enormous business opportunity. Retrieved from www.ecolandscaping.org/03/designing-ecological-landscapes/native-plants/green-landscapes-on-solar-sites-an-enormous-business-opportunity
Montag, H., Parker, G., & Clarkson, T. (2016). The effects of solar farms on local biodiversity: a comparative study. Clarkson & Woods and Wychowood Biodiversity. doi: 978-1-5262-0223-9
Semeraro, T., Pomes, A., Del Giudice, C., Negro, D., & Aretano, R. (2018). Planning ground based utility scale solar energy as green infrastructure to enhance ecosystem services. Energy Policy, 117, 218-227. doi.org/10.1016/j.enpol.2018.01.050
Silver, C. (2019, June 30). Massachusetts solar. Retrieved from www.seia.org/state-solar-policy/massachusetts-solar
Solar Field Meadow Energy [Photograph]. Retrieved from pixabay.com/photos/solar-field-meadow-energy-current-3381073
USA map PNG [Photograph]. Retrieved from pngimg.com/download/46479



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