

Integrating *Drawdown's*
solutions into your high
school science classroom

Sarah Duffer
Asheville High School
August 21st, 2018



Overview

- What is Drawdown?
- Who is Sarah Duffer and what does she teach?
- Integration into high school science classes
- What is the Drawdown EcoChallenge and how did Asheville High win first place?
- What's next?

Getting to know *Drawdown*

1. What is it?
2. Who is the Drawdown team?
3. How did they identify the solutions?
4. Their paradigm



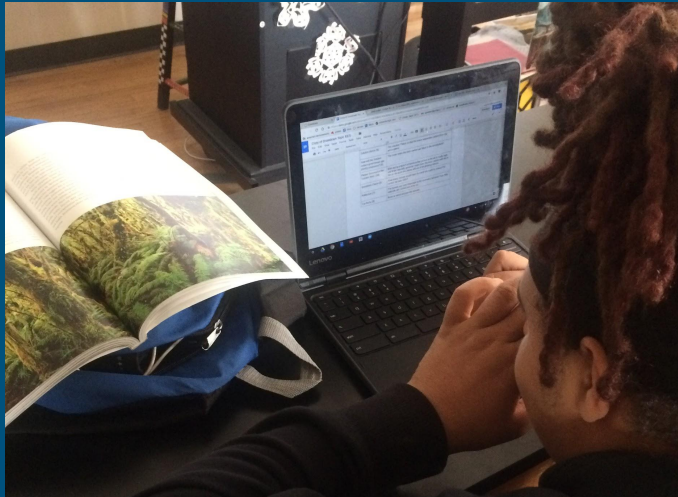
Introduction to Teacher and School

- Sarah Duffer, 15 year Earth & Environmental Science teacher at
- Asheville High School, Asheville North Carolina
- Courses:
 - 9th grade Earth/Environmental Science
 - Standard
 - Honors
 - Advanced Placement Environmental Science



How has Duff implemented the book in the classroom?

→ 9th grade Earth & Environmental Science Standard and Honors



Name: _____ /50

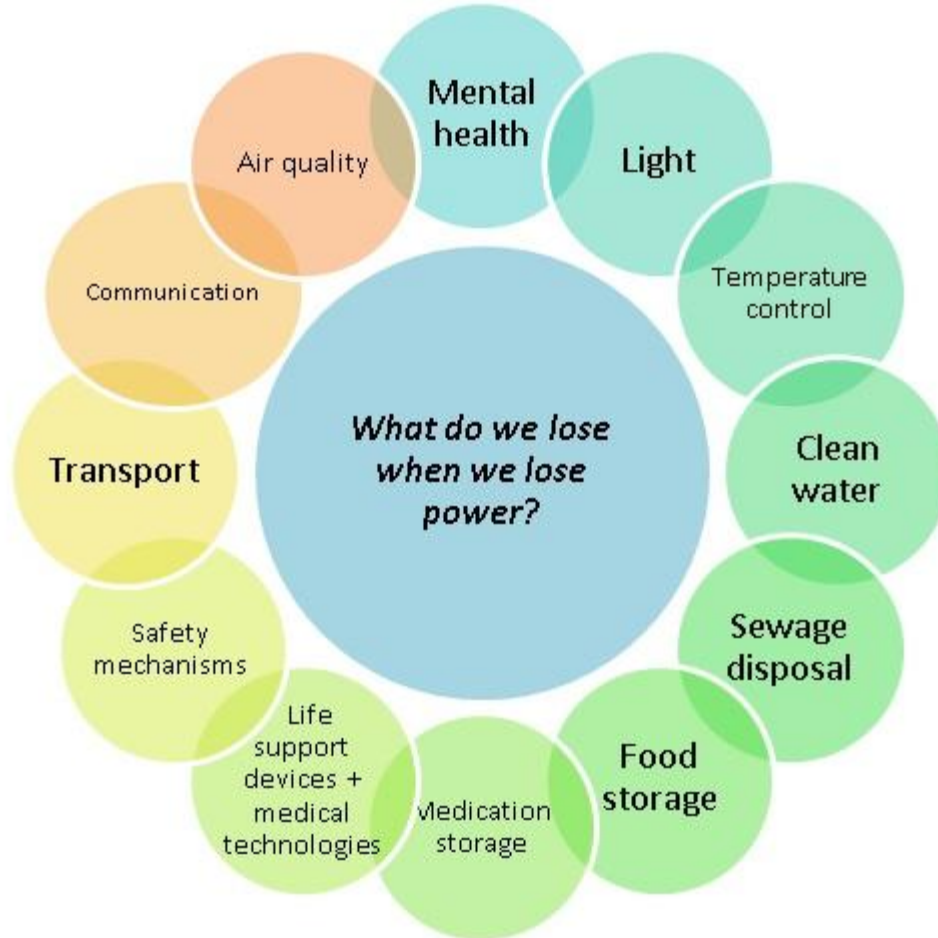
Studying Drawdown Solution by Solution

Directions: Make a copy of this document, write your last name in the Title.

Criteria (point value)	Your Response:
Title and rank # of the Solution I read (1):	
List of words I didn't know or are very unfamiliar with (5):	None is not an acceptable answer.
List of concepts I didn't know or are very unfamiliar with (5):	None is not an acceptable answer.
Solution thesis (5):	
How will the Solution reduce greenhouse gas (GHG) emissions? (5)	
Please Summarize the Solution here: (16)	
Questions I have (3):	None is not an acceptable answer.
Reflection (7):	

[Click here](#) for document link.

Rebuilding a more resilient Puerto Rico



How has Duff implemented the book in the classroom?

- Drawdown Ecochallenge Assignments



TOP TEAMS
DRAWDOWN ECOCHALLENGE

1 
ASHEVILLE HIGH SCHOOL!

2 
TAISUGAR CIRCULAR ECONOMY

3 
BUILT ECOLOGY & FRIENDS

4 
COMERICA BANK

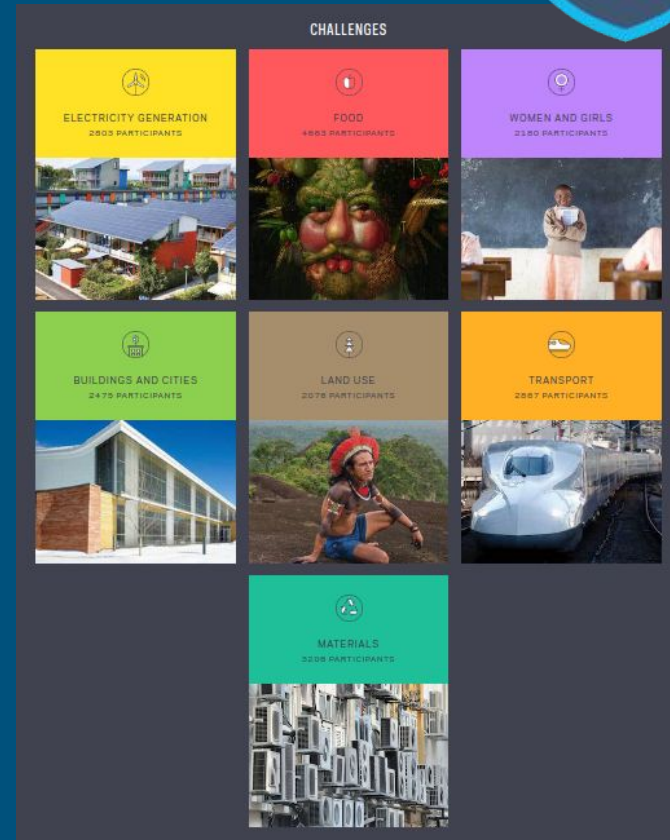
5 
ARROWSTREET WEST

With 512 team members and 132,649 points, **Asheville High School** is the winner of the 2018 Drawdown EcoChallenge!

What is the Drawdown EcoChallenge?



- Northwest Earth Institute
- 21 day engagement competition in April
- Focused on carbon reduction
- Rooted in the Drawdown Solutions across 7 sectors
- Over 80 EcoChallenges are either one time or daily challenges
- How are points earned?



Drawdown EcoChallenge: Our Goal



APRIL 4 - APRIL 25, 2018

ASHEVILLE HIGH SCHOOL!

ASHEVILLE HIGH SCHOOL

To have every Environmental Science student on campus identify, communicate, and practice concrete actions that reverse climate change.

Drawdown EcoChallenge: Our Team



- 512 participants
 - All Environmental Science Spring 2018 students
 - Other students including environmental groups
 - Teachers
 - Community members





Drawdown EcoChallenge: Lessons

[Google site](#) with supporting resources

10 lessons:

Energy	Food	Land Use	Materials
Biomass	Food Waste	Forest Restoration	Bioplastics
Wind Turbines and Wind Energy	Forest-friendly foods	Silvopasture	HCFCs
Geothermal		Temperate Forests	

Drawdown EcoChallenge: Use of Social Media



- Instagram
 - Stories
 - Posts
- Twitter
- Emails in the final days

DRAWDOWN ECOCHALLENGE

What: a series of challenges that you can choose to do to be more eco-friendly
When: Apr 4-25, 2018
Who: Anyone!!

More info in link in bio

ahssustainability · Following

ahssustainability The ecochallenge is a fun and interactive way to learn about and implement the 100 most effective solutions to global warming. Actions range from calling representatives to tweaking your daily habits. Categories include food, girls & women, and transportation. There's something for everyone! Link in bio to sign up! PS: it's a national competition and AHS is in 6th place right now 🍀 #theacsway

ahssolarcougars @ahssustainability there's also a link in the student drop down menu on our school webpage... let's crush climate change!

nweiecochallenge Awesome - thanks for joining! Be sure to check out our Resources section for ideas and promo materials to help grow your team. 🌍

18 likes
MARCH 29
Add a comment...

Teenagers are Change Makers...



**Student-organized walk-out to protest
gun violence in schools.
March 2018**

... despite enormous loss



Drawdown EcoChallenge Successes



UP TO
2,068
MILES

TRAVELLED BY CARPOOL



UP TO
335
LOCALLY SOURCED MEALS

CONSUMED



UP TO
63
DONATIONS

MADE



UP TO
406
CONVERSATIONS

WITH PEOPLE



UP TO
43
PEOPLE

HELPED



UP TO
86
DOCUMENTARIES

WATCHED



UP TO
475
LIGHTBULBS

REPLACED



UP TO
39
HOURS

VOLUNTEERED



UP TO
782
PUBLIC OFFICIALS OR
LEADERS

CONTACTED



UP TO
7,120
POUNDS OF CO2

HAVE BEEN SAVED



UP TO
218
MILES

TRAVELLED BY BIKE



UP TO
1,589
GALLONS OF WATER

HAVE BEEN SAVED



UP TO
34,132
MINUTES

SPENT LEARNING



UP TO
1,568
MEATLESS OR VEGAN
MEALS

CONSUMED



UP TO
379
ZERO-WASTE MEALS

CONSUMED



UP TO
606
MILES

TRAVELLED BY BUS



Drawdown EcoChallenge Successes

- Our Grand Prize: A one hour web call with Drawdown editor Paul Hawken



Drawdown EcoChallenge in the Future



- JOIN US in April 2019!
- Collaborate with us!



Let's connect!

Sarah.Duffer@acsqmail.net



AND



@AHSsolarCougars

