New England Tidal Power Company:
Clean, Sustainable Energy for Rodgersville's Future[1]

Erika Gibb was still adjusting to the cold New England climate. She'd moved to Rodgersville from Valley City in the late fall, and no amount of research could have prepared her for the biting wind chill that morning as she stepped out of her Back Bay apartment. Erika spent her mornings jogging the miles of public trails that crisscross this historic town before returning to her apartment for work. Like many, over the last year, Erika worked from home because of the global pandemic; regardless of her virtual work arrangement, she had decided to move to Rodgersville to be closer to her new job and to learn as much about the local community as possible. Erika's career was taking off after successfully managing the Valley City Conservation Trust campaign, an effort to help pass the green property credits tax in Valley City last year. Erika was learning how quickly your star can rise after managing a successful legislative affairs campaign. She was lured away from the VCCT by the New England Tidal Power Company (NETPC) to help run a public relations campaign for the construction of a new green-energy initiative along the New England coast.

You are Erika. Your job is to prepare a paid media plan for NETPC to coincide with construction of the first tidal power facility along the New England coastline, which will be based in Rodgersville. This will be a **branding campaign to inform local residents** about the values of NETPC and the benefits of this new facility to the region. NETPC has secured a **budget of $2,500,000** for media placements from **June to December 2021**. It's your job to prepare and pitch a media plan to NETPC's board. Your success will be measured by public opinion polls, and ultimately will impact NETPC's ability to work with local and state government, other businesses and the broader Rodgersville community for years to come. The desired result is favorable and/or neutral opinions of NETPC by 75% or more of the Rodgersville adult population, that will be determined by third party polling. A preliminary poll conducted in January 2021, when plans for the facility became public, showed that only 52% of Rodgersville adults were aware of NETPC and the tidal power facility plans, and among those who were aware only 40% had a favorable or neutral opinion about NETPC. Simply, you know there is room for improvement. There are no known opposition groups currently using paid or earned media to shape public opinion against NETPC.

Making Waves

The New England Tidal Power Company was founded (and funded) by billionaire investor and inventor Desiree Wolf. While others have their eyes on the sky for opportunities in space, Des believes the future of energy is in the ocean. Using her proprietary turbines, Des's NETPC will break ground on a state-of-the-art tidal power facility in the fall of 2021. Local

residents, beachgoers, and environmentalists have started to publicly voice their concerns with the facility and the impacts it will have on the environment and aesthetics of Rodgersville.

While it's generally accepted that tidal energy is clean and consistent, plus relatively cheap to maintain long term, NETPC's primary image problem is the environmental risks posed by construction. Specifically, by introducing large machinery, like Wolf's turbines, into the environment it could reshape the seashore and invite invasive species into the area, threatening the local species. This is particularly a concern for the local economy and the thriving fishing community based in Rodgersville. Another concern is the aesthetics of this facility along the coastline: how will it impact the beaches for vacationers, residents and property owners? Erika knows that misinformation and misunderstanding will be her biggest battle, and she will need to consider these things while deciding who to target with her media plan.

Strength in Numbers

You decide once again to reach out to your old friend Alex Burfoot who helped you on the VCCT project. You sign a contract with Alex's firm for media research, primarily because they subscribe to Nielsen[2] ratings data and Scarborough consumer surveys, including the Rodgersville media market.

The first step in media planning is deciding on and defining a target audience group, says Alex. After reviewing the Rodgersville Scarborough data, you identify a few important descriptive statistics. First, you see that the total adult population in Rodgersville is 5.9 million[3]. You also notice that nearly 40% of adults self-reported always voting in local elections, a metric that you are comfortable using as a proxy for propensity to be civically involved. Finally, you notice that Rodgersvillians are more likely to practice multiple eco-friendly behaviors (32.8%) than to practice NO eco-friendly behaviors (12.2%). Using a simple matrix, you can compare several of these behavioral traits to make decisions about potential target audiences.

Alex helps you create a target group that you decide to internally call "**Wave Makers**", adults who *Always OR Sometimes vote in local elections AND Practice 5 or more eco-friendly activities on a regular basis.* According to the data, that group makes up 28.1% of Rodgersville adults (Table 1). You think there are other potential targets, too, so you request a more robust data set to help inform your decisions. The data will drive your planning outcomes.

Alex also reminds you of a few crosstab metrics to help you analyze this data. Alex said, "Erika, remember that the target percent, which can also be called the vertical percent, tells you the row variable as a percentage of the column group, while the horizontal percent gives you the column variable as a percentage of the row group". You decide to keep a calculator handy, to help with the media math and to better understand the relationships between variables as you work through the various crosstab reports. Following Alex's example above, you can see from Table 1 that the target % for adults who perform 5 or more eco-friendly activities and always vote is 46.5%, calculated by using the projected population of that group

(907,251) divided by the projected population of all adults who do 5 or more eco-activities on a regular basis (1,949,653).

$$907,251 \div 1,949,653 = 0.4653 \quad (X\ 100 = 46.5\%)$$

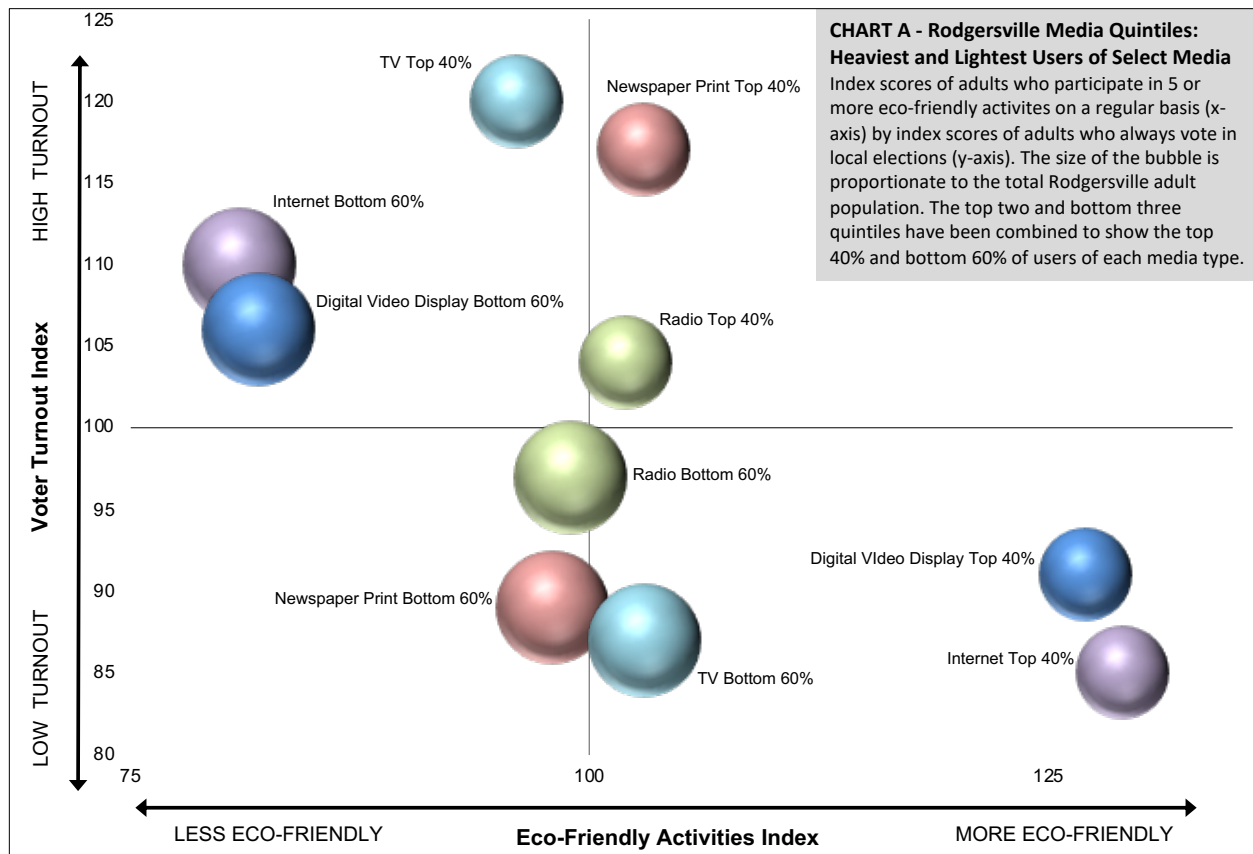| Table 1: Potential target audience(s) matrix		All Adults 18+	Number of eco-friendly activities done on a regular basis		Adults Who Participate in Water Activities (Fishing, Boating, Swimming)	Adults Who Plan to take a Beach Vacation in the Next 12 mos
			5 or more activities	None		
All Rodgersville Adults	Proj	5,942,069	1,949,653	722,490	2,864,156	1,845,340
	Vert %	100.0%	100.0%	100.0%	100.0%	100.0%
	Horz %	100.0%	32.8%	12.2%	48.2%	31.1%
	Index	100	100	100	100	100
Always Vote in Local Elections	Proj	2,340,771	907,251	212,998	1,086,512	661,957
	Target %	39.4%	46.5%	29.5%	37.9%	35.9%
	Horz %	*100.0%*	*38.8%*	*9.1%*	*46.4%*	*28.3%*
	Index	100	118	75	96	91
	Total %	39.4%	15.3%	3.6%	18.3%	11.1%
Sometimes Vote in Local Elections	Proj	2,218,950	758,130	222,055	1,170,235	807,608
	Target %	37.3%	38.9%	30.7%	40.9%	43.8%
	Horz %	*100.0%*	*34.2%*	*10.0%*	*52.7%*	*36.4%*
	Index	100	104	82	109	117
	Total %	37.3%	12.8%	3.7%	19.7%	13.6%
Never Vote in Local Elections	Proj	1,382,349	284,272	287,438	607,409	375,776
	Target %	23.3%	14.6%	39.8%	21.2%	20.4%
	Horz %	*100.0%*	*20.6%*	*20.8%*	*43.9%*	*27.2%*
	Index	100	63	171	91	88
	Total %	23.3%	4.8%	4.8%	10.2%	6.3%
Potential NETPC Targets			28.1% Wave Makers			
			8.4% Tidal See-Sawers			
Non-Targets			8.5% Indifferents			

This also means that adults who perform 5 or more eco-friendly activities on a regular basis are 18% more likely to always vote in local elections than the average Rodgersville adult. You know this because of the index score of 118, which is calculated by dividing the target % of adults who perform 5 or more eco-friendly activities and always vote in local elections (46.5%) by the target % of all Rodgersville adults who always vote in local elections (39.4%).

$$46.5\% \div 39.4\% = 1.18 \quad (X\ 100 = 118\ \text{index score})$$

Alex offered one final idea while the two of you were brainstorming. He suggested using infographics as a way to visually explain data. Alex's team quickly put together a bubble chart (a skill he learned in business school from a favorite professor, Bill Silkthem) to demonstrate the utility of data visualization. Chart A demonstrates the relationship between adults who participate in 5 or more eco-friendly activities (x-axis) on a regular basis and adults who always vote in local elections (y-axis) in regard to media usage. Quintiles represent one-fifth (20%) of a population divided evenly from most to least of a defined category. In this example, the 1st quintile of TV users represents the heaviest users of TV, meaning the top 20% of TV watchers in Rodgersville. Alex's team combined the top two quintiles and bottom three quintiles to show you the top 40% of users (1st and 2nd quintiles) of select media types and bottom 60% users (3rd through 5th quintiles).

You easily see that the heaviest users of the internet (Internet Top 40%) tend to be more eco-friendly than any other category of media users, but they are also least likely to vote

in local elections. The heaviest readers of print newspapers and listeners of radio are the only media users who are both high turnout voters and more likely to participate in 5 or more eco-friendly activities on a regular basis. You pocket this idea for later, knowing that it can help explain your budget allocations to the board when it's time to make your pitch.

CHART A - Rodgersville Media Quintiles: Heaviest and Lightest Users of Select Media
Index scores of adults who participate in 5 or more eco-friendly activites on a regular basis (x-axis) by index scores of adults who always vote in local elections (y-axis). The size of the bubble is proportionate to the total Rodgersville adult population. The top two and bottom three quintiles have been combined to show the top 40% and bottom 60% of users of each media type.

Building Your Reef-eral

While Alex's team is building your custom audience segments along with some other behavioral and demographic based targeting characteristics, you decide to enlist the help of your new colleague on the media buying team, Meb Salazar. Meb has 25 years of experience placing media and negotiating costs in the Rodgersville media market, so he will help build your "media menu". Meb has a wealth of knowledge and experience; like your dad, he wants to share it with you whether or not you want to (or need to) hear it. When Meb receives a planning task like NETPC's media plan he can't help but remind you of some important media planning and buying terms and mathematical relationships.

Meb started by providing you with a sample table (Exhibit A) that was a simple list of television dayparts and an associated CPM. Per Meb,

1. This is the average estimated cost-per-thousand impressions, or CPM, for adults 18+ for each of the dayparts listed. Sometimes "impressions" are also called

"exposures" or "opportunities to see."[4] The term impression does not mean that an exposure made an impression or that those exposed paid any attention, Meb points out. "We can't guarantee that anyone will see our ads, we can only create the opportunity for ads to be seen".

2. The CPMs are for planning purposes and meant to be directional. Each local television vendor will price and sell their inventory at CPMs that could be higher or lower, and daypart programming varies by vendor. These CPMs are *averages* for broadcast television in the Rodgersville media market.

3. CPMs are not the same as the cost per spot (the rate charged for a single commercial unit) for traditional TV and radio ads. While, on average, it might cost $9 to each 1,000 Rodgersville adults using early morning (5a-7a) television, note that the cost per spot would be determined by the estimated impressions a program will deliver multiplied by the CPM. For example, if Station A achieves an average adult 18+ audience of 35,000 per episode of their 5a-7a morning news, that means the cost per spot would be $315 gross[5] ((35,000 A18+/1,000)*$9.00 CPM = $315 cost per spot).

EXHIBIT A: NETPC Media Planning Costs and Audiences	
TELEVISION (:30)	**Avg Planning Costs per 1000 adult 18+ impressions (CPM)**
Combined Broadcast Television Networks (by daypart)	
Early Morning (5a-7a)	$ 9
Early Morning Network Shows (7a-9a)	$ 10
Daytime (9a-4p)	$ 6
Early Fringe (4p-5p)	$ 7
Early News (5p-7p)	$ 17
Prime Access (7p-8p)	$ 21
Primetime (8p-11p)	$ 36
Late News (11p-1130p)	$ 30
Late Fringe (1130p-1a)	$ 12

Putting It All Together

A few days after receiving Meb's CPM table, Alex's team submits to you their crosstab analysis. Now that you are armed with Meb's CPM data and Alex's custom research, you are able to create a more detailed 'shopping list' of media options to consider for your media plan.

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[4] Student competitors are strongly encouraged to spend a few minutes reviewing basic media planning terminology and math. See *Inside Campaigns*, Chapter 7, especially pages 119-137, available to users of this case here.
[5] All media planning should be done in gross dollars.

You expand on the media planning costs and audiences spreadsheet, Exhibit A, to create the following[6]:

EXHIBIT A: NETPC Media Planning Costs and Audiences			Wave Makers		High Turnout Voters	
TELEVISION (:30)	Avg Planning Costs per 1000 adult 18+ impressions (CPM)		As Horz% of Media Audience	Wave Makers Index	As Horz% of Media Audience	Local Voting Index
Combined Broadcast Television Networks (by daypart)						
Early Morning (5a-7a)	$	9	27.8%	99	49.8%	126
Early Morning Network Shows (7a-9a)	$	10	27.5%	98	52.8%	134
Daytime (9a-4p)	$	6	28.8%	103	50.3%	128
Early Fringe (4p-5p)	$	7	29.7%	106	52.4%	133
Early News (5p-7p)	$	17	29.2%	104	50.8%	129
Prime Access (7p-8p)	$	21	28.6%	102	50.7%	129
Primetime (8p-11p)	$	36	29.0%	103	47.8%	121
Late News (11p-1130p)	$	30	28.3%	101	51.9%	132
Late Fringe (1130p-1a)	$	12	29.6%	106	49.6%	126
Spanish Language Broadcast Television						
Early Morning/Daytime	$	33	38.5%	137	44.1%	112
Early News	$	38	30.0%	107	48.1%	122
Late News	$	45	32.4%	115	49.1%	125
Primetime	$	62	33.5%	120	48.6%	123
Combined Cable Network Groups						
Arts/Culture/History	$	25	23.8%	85	42.4%	108
Cable Business	$	50	26.9%	96	52.8%	134
Children & Teen	$	15	24.3%	87	33.4%	85
General Entertainment	$	30	26.8%	96	41.0%	104
Lifestyle/Info-tainment	$	14	26.9%	96	43.5%	110
Movies	$	28	24.9%	89	45.8%	116
Cable News	$	20	29.3%	104	50.1%	127
Other/Niche/Education	$	45	24.7%	88	35.7%	91
Regional Sports Networks	$	19	30.4%	109	47.9%	122
Spanish Language Sports	$	32	14.2%	51	32.8%	83
Sports Daytime	$	16	28.1%	100	47.9%	122
Sports Primetime/Weekend	$	37	30.3%	108	46.5%	118
Satellite Dish Viewing: All Day Rotator	$	8	21.9%	78	42.3%	107
RADIO (:60)						
Combined Radio Formats**						
Newstalk/Information	$	19	34.6%	124	49.5%	126
Rock	$	22	31.2%	111	38.7%	98
Country	$	20	21.5%	77	36.9%	94
Oldies	$	37	21.6%	77	79.5%	202
Pop Contemporary	$	25	26.9%	96	32.2%	82

You quickly notice different media consumption differences between the Wave Makers and the High Turnout Voter audience segments. For instance, if you decide to use cable *Arts/Culture/History* networks in your media plan, then you will be 15% less efficient at reaching Wave Makers, but 8% more likely to reach High Turnout Voters with that media vehicle. Now, thanks to Alex's data and Meb's subtle reminders, you know that if you decide to buy 500,000 impressions of adults 18+ in broadcast daytime television, then you would need to budget $3,000 towards that media vehicle ($6 cpm X (500,000 impressions /1,000) = $3,000

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[6] See attached excel worksheet for the complete table; a partial table was included on this document as a reference, but for formatting purposes we did not include the full CPM table.

budget). That budget decision could also be explained as netting you 144,000 Wave Makers impressions and 251,500 High Turnout Voters impressions on your media plan.

500,000 Adult 18+ imps X 28.8% horz % of Wave Makers = 144,000 Wave Makers imps

Alex recommended that you take some time to review the massive crosstab file that he prepared for you. It is full of demographic, behavioral, consumer and media data that may, or may not, be useful to you. You might be inspired by the variables to **create your own custom-audience segment.** Should you decide to create your own custom target audience, you will need to email [Alex] your request *no later than NOON eastern time on Friday, February 26, 2021* complete with the exact variable definitions that you want to use along with the *AND/OR* coding sequence[7].

Alex also offered to help you navigate any questions that you might have with the data, the audience segments, or anything else related to the NETPC request for a media plan by scheduling a conference call for **Monday, February 22, 2021 at 4PM ET**[8]. Finally, he reminded you that impressions and GRPs are both important measures to a media plan, and you should report impressions AND impressions as a percentage of each respective target population (GRPs). Once you are familiar with the task, the media currency and the data, then it's time to prepare your media plan and write your rationale supporting your strategy.

Submitting Your NETPC Media Plan to the Washington Media Scholars Foundation

Please prepare a written document for NETPC that answers the below questions. All submissions are due by **midnight eastern time** on **March 26, 2021**. There are no requirements for what the written document should end up looking like, but it is suggested that you include the following:

    A. A month-by-month media plan in an Excel spreadsheet with your recommended allocation of the $2,500,00 budget. Make sure that your name and contact information appear at the bottom of spreadsheet.

    B. A Word document no longer than ten pages single-spaced, in which you answer the following questions in support of your media mix allocations. If you desire, the document may include tables and/or charts in the document or as an appendix. Include your name, and contact information at the top of the Word document.

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[7] WMSF staff will create the audience definition that you request and return a crosstab file to you with the data included. Please allow up to 5-business days for WMSF staff to produce the crosstab report for you. Requests should be emailed to info@mediascholars.org .

[8] WMSF will provide more information about this conference call prior to 2/22/21 including contact info and participants. It is highly recommended that at least one team member participates in this call.

1. Who is your target audience(s) group? Why?
2. How does your target audience(s) use media?
3. What mix of media vehicles form a cost-effective way to spend the $2,500,00 budget to reach your audience? What media received the largest share(s) of your budget and why? What media received the smallest share(s) and why?
4. How would you schedule the spending of the budget between June and December 2021?
5. If the NETPC could include any of other types of media not listed on the cost spreadsheet, what other media vehicles would you like to see included in your plan (paid or earned)?
6. Please disclose the names of any professors or other advisers, if any, who assisted you.

Good Luck!

APPENDIX

Cable Network Watched Past 7 Days: This chart demonstrates the likelihood of Rodgersville adults who are eco-friendly (x-axis) and always vote in local elections (y-axis) to watch various cable networks.

Ways Internet Used: This chart demonstrates the likelihood of Rodgersville adults who practice eco-friendly behaviors (x-axis) and always vote (y-axis) to do various things on the internet. This aligns with the quintile data previously presented; internet users are more likely to be eco-friendly than the average Rodgersville adult.