**Media Group Assignments**

Assignment Questions (for each piece of media):

1. Briefly (>50 words) summarize the main point of the piece
2. What is one new or surprising thing you learned?
3. Pose a follow up question or something you would like to learn more about   
   (note: used these responses to seed class discussion)

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| **Group #1: Water Resources** | | |
| Article | National Geographic - The World's Biggest Lakes are Drying Up. Here's Why. | <https://www.nationalgeographic.com/magazine/2018/03/drying-lakes-climate-change-global-warming-drought/> |
| Article | BBC - [Is the World Running Out of Fresh Water?](https://canvas.iastate.edu/courses/61451/files/8329020/download?wrap=1) | <https://www.bbc.com/future/article/20170412-is-the-world-running-out-of-fresh-water> |
| Radio | Many Native Americans Can't Get Clean Water, Report Finds | <https://www.npr.org/2019/11/18/779821510/many-native-americans-cant-get-clean-water-report-finds> |
| Radio | NPR - Turkish Valley Home To Human Settlements For Millenia Soon Will Be A Lake | <https://www.npr.org/2019/12/01/783932621/turkish-valley-home-to-human-settlements-for-millenia-soon-will-be-a-lake> |
| Articles | Yale 360 - Turkey’s Dam-Building Spree Continues, At Steep Ecological Cost | <https://e360.yale.edu/features/turkeys-dam-building-spree-continues-at-steep-ecological-cost> |
| Podcast | Planet Money - [Episode 640: The Bottom of the Well](https://www.npr.org/sections/money/2018/04/25/605848456/episode-640-the-bottom-of-the-well) | <https://www.npr.org/sections/money/2018/04/25/605848456/episode-640-the-bottom-of-the-well> |
| Podcast | The Indicator- [Trickle Down Economics: Pricing H2O](https://www.npr.org/sections/money/2018/08/08/636867779/trickle-down-economics-pricing-h2o) | <https://www.npr.org/sections/money/2018/08/08/636867779/trickle-down-economics-pricing-h2o> |

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| **Group #2: Lotic & Lentic Waters** | | |
| Blog | 10 Female Freshwater Scientists You Should Know About | <https://abbieernst.wixsite.com/limnolover/post/10-female-freshwater-scientists-you-should-know> |
| Paper | Encyclopedia of Inland Waters – Lakes as Ecosystems | PDF |
| Paper | Encyclopedia of Inland Waters – Streams and Rivers as Ecosystems | PDF |
| Video | Zavaleta – Rivers of California video | <https://www.youtube.com/watch?v=LWOPUTBJKnc&list=PLBEIahTDJmdkf-eL6ZQZtvxXFHQUKl0cF&index=21&t=0s> |

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| **Group #3: Water Budgets & Morphometry** | | |
| Podcast | Planet Money – Episode 706: Water’s Worth | <https://www.npr.org/sections/money/2016/06/17/482459229/episode-706-waters-worth> |
| Article | Yale 360 - In Era of Drought, Phoenix Prepares for a Future Without Colorado River Water | <https://e360.yale.edu/features/how-phoenix-is-preparing-for-a-future-without-colorado-river-water> |
| Video | Video – The volume and mean depth of Earth’s lakes | <https://www.youtube.com/watch?v=MDnLz1URrO8> |
| Radio | Three Part NPR Series on the Cost and Impact of Too Much Water | 1. Wet, Wild And High: Lakes And Rivers Wreak Havoc Across Midwest, South - <https://www.npr.org/2019/08/14/749062901/wet-wild-and-high-lakes-and-rivers-wreak-havoc-across-midwest-south> |
| 1. Months Of Flooding On Mississippi River Marooned Midwest Trade - <https://www.npr.org/2019/08/16/750487354/months-of-flooding-on-mississippi-river-marooned-midwest-trade> |
| 1. Wet Weather In Minnesota Erodes Shorelines And Limits Recreation- <https://www.npr.org/2019/08/15/751365957/wet-weather-in-minnesota-erodes-shorelines-and-limits-recreation> |

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| **Group #4: Light Temperature** | | |
| Article | Science News – Lakes feel the heat from climate change | <https://www.sciencenews.org/article/lakes-worldwide-feel-heat-climate-change> |
| Radio | “Warming Waters Push Fish to Cooler Climates” **AND** “Climate Change Threatens Wild Rice” | <https://www.npr.org/sections/thesalt/2018/05/17/611716731/warming-waters-push-fish-to-cooler-climes-out-of-some-fishermen-s-reach> |
| <https://www.npr.org/sections/thesalt/2018/08/07/632840187/climate-change-threatens-midwests-wild-rice-a-staple-for-native-americans> |
| Video/ Reading | “Underwater Light and Seagrass” video and reading | <https://ecosystemsontheedge.org/underwater-light-and-seagrass/> |
| Article | Yale 360 – How climate change could jam the ocean’s circulation | <https://e360.yale.edu/features/will_climate_change_jam_the_global_ocean_conveyor_belt> |

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| **Group #4b: Salinity (didn’t get to use these this semester…)** | | |
| Reading | Smithsonian Magazine - What Happens to All the Salt We Dump On the Roads? | <https://www.smithsonianmag.com/science-nature/what-happens-to-all-the-salt-we-dump-on-the-roads-180948079/> |
| Radio | MPR - Road salt is polluting our water. Here's how we can fix it | <https://www.mprnews.org/story/2017/12/06/road-salt-water-pollution> |

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| **Group #5: Dissolved Oxygen & Organic Matter** | | |
| Radio | NPR - Coastal Pacific Oxygen Levels Now Plummet Once A Year | <https://www.npr.org/2018/10/28/658953894/coastal-pacific-oxygen-levels-now-plummet-once-a-year> |
| Paper | Van Meter et al. (2018) Legacy N and the Dead Zone | PDF, also: <https://apnews.com/3479a6e8caf74db1bff41f94429f96ea/Study:-'Legacy'-nitrogen-also-feeds-Gulf-of-Mexico-dead-zone> |
| Paper | Jansen et al. (2014) Linking soils and aquatic ecosystems | <https://www.researchgate.net/publication/274449862_Dissolved_Organic_Matter_Linking_Soils_and_Aquatic_Systems> |
| Article | The Atlantic – The Giant Panda is a Closet Carnivore | <https://www.theatlantic.com/science/archive/2019/05/giant-panda-closet-carnivore/588553/>  \*note: used this article as an example of stoichiometry |

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| **Group #6: Sediments & Nitrogen** | | |
| Podcast | Planet Money – Episode 853: Peak Sand | <https://www.npr.org/sections/money/2018/07/13/628894815/episode-853-peak-sand> |
| Radio | NPR – Residents Of An Eroded Alaskan Village Are Pioneering A New One, In Phases | <https://www.npr.org/2019/11/02/774791091/residents-of-an-eroded-alaskan-village-are-pioneering-a-new-one-in-phases> |
| Paper | Bernhard et al (2010) – The N cycle | PDF |
| Article | The Conversation - Farm ponds can act as greenhouse gas sinks in the Canadian Prairies | <http://theconversation.com/farm-ponds-can-act-as-greenhouse-gas-sinks-in-the-canadian-prairies-115058> |

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| **Media Group #7: Phosphorus and Primary Production** | | |
| Podcast | Planet Money – Episode 820: P is for Phosphorus | <https://www.npr.org/sections/money/2018/01/26/581156723/episode-820-p-is-for-phosphorus> |
| Article | Science – Should Oceanographers Pump Iron? | <https://science.sciencemag.org/content/318/5855/1368> |
| Articles | “Heavier rains and manure mean more algae blooms” **AND** Study finds Manitoba lakes susceptible to blooms” | <https://news.wisc.edu/heavier-rains-and-manure-mean-more-algae-blooms/> **AND** <https://www.cbc.ca/news/canada/manitoba/manitoba-lakes-algal-blooms-research-1.4288999> |
| Video | NALMS Student Video Series #3: Macrophytes | <https://www.youtube.com/watch?v=s478je4JDrY> |

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| **Media Group #8: HABs and Microbes** | | |
| Video | NALMS Student Video Series #6: Harmful Algal Blooms (HABs) | <https://www.youtube.com/watch?v=YhATHXejH7s> |
| Article | The Scientists – ‘Archaea Family Tree Blossoms, Thanks to Genomics’ | <https://www.the-scientist.com/features/archaea-family-tree-blossoms-thanks-to-genomics-36643> |
| Radio | As Climate Warms, Algae Blooms In Drinking Water Supplies | <https://one.npr.org/?sharedMediaId=641606668:644355905> |

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| **Media Group #8b: Zooplankton (didn’t get to use these this semester…)** | | |
| Video/ Reading | Science - Watch the nightmarish attack of a phantom midge larvae | <https://www.sciencemag.org/news/2019/03/watch-nightmarish-attack-phantom-midge-larvae> |
| Article | A look at the competitive brine shrimp industry of Great Salt Lake | <https://www.ksl.com/article/33078188/a-look-at-the-competitive-brine-shrimp-industry-of-great-salt-lake> |
| **Media Group #9: Fish, waterfowl, food webs** | | |
| Video/ Reading | New York Times - https://www.nytimes.com/2017/12/26/science/largemouth-bass-jaw.html | <https://www.nytimes.com/2017/12/26/science/largemouth-bass-jaw.html> |
| Article | Mother Jones – “The Bizarre and Inspiring Story of Iowa’s Fish Farmers” | <https://www.motherjones.com/environment/2017/01/barramundi-aquaculture-fish-farm-iowa-veroblue/> |
| Radio | NPR - Saving California's Kelp Forest May Depend On Eating Purple Sea Urchins | <https://one.npr.org/?sharedMediaId=756929657:759554332> |
| Article | CityLab - How Catfish and Algae Are Cleaning Up the Chicago River | <https://www.citylab.com/environment/2015/12/how-catfish-and-algae-are-cleaning-up-the-chicago-river/420996/> |

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| **Media Group #10: Resilience and Synchrony** | | |
| Article | Discover Magazine - New study reveals "extraordinary change" in El Niño possibly linked to climate change | <https://www.discovermagazine.com/environment/new-study-reveals-extraordinary-change-in-el-nino-possibly-linked-to-climate-change#.XbMGu5pKhaR> |
| Article | ASU Ask a Biologist - Hot Flashes in the Ocean | <https://askabiologist.asu.edu/plosable/el-nino-coral-reefs> |
| Readings | Regime Shift Database | <https://www.regimeshifts.org/> (have students pick a detailed case study – can also use as a separate assignment) |

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| **Media Group #11: Biodiversity and Invasive Species** | | |
| Article | Yale 360 - Are Numbers of Species a True Measure of Ecosystem Health? | <https://e360.yale.edu/features/are-numbers-of-species-a-true-measure-of-ecosystem-health> |
| Article | Scientific American – America’s freshwater mussels are going extinct | <https://blogs.scientificamerican.com/extinction-countdown/americas-freshwater-mussels-are-going-extinct-heres-why-that-sucks/> |
| Article | Star Tribune – How the zebra mussel scourge spread | <https://www.maisrc.umn.edu/news/zm-scourge> |
| Radio | NPR – New Kind of Killer Whale | <https://www.npr.org/2019/03/07/701101633/new-whale-species> |
| Article | Nature – Giant freshwater fishes are in alarming decline | <https://www.nature.com/articles/d41586-019-02403-z> |

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| **Media Group #12: Contaminants and Restoration** | | |
| Article | Splice - Bugs on Drugs: Devastating Effects of Pharmaceutical Pollution | <https://splice-bio.com/bugs-on-drugs-devastating-effects-of-pharmaceutical-pollution/> |
| Video/ Reading | Poughkeepsie Journal - How bad is drug pollution in the Hudson? | <https://www.poughkeepsiejournal.com/story/news/2017/04/14/how-bad-drug-pollution-hudson/100474470/> |
| Article | New York Times - Pleistocene Rewilding | <https://www.nytimes.com/2005/12/11/magazine/pleistocene-rewilding.html> |
| Article | Yale 360 - Why Isn’t Publicly Funded Conservation on Private Land More Accountable? | <https://e360.yale.edu/features/why-isnt-publicly-funded-conservation-on-private-land-more-accountable> |
| Article | Yale 360 - On the Northwest’s Snake River, the Case for Dam Removal Grows | <https://e360.yale.edu/features/on-the-northwests-snake-river-the-case-for-dam-removal-grows> |