

## Vaping Policy

	Status Quo	Ban Vaping	Ban Indoor Vaping	Tax Vaping Products	Ban Vaping under 21 + ban marketing for kids
Public health improves	<ul style="list-style-type: none"> <li>- deaths seem to be tied only to THC vaping not regular nicotine vaping (McIntyre and McIntyre, 2019)</li> <li>- specifically, vitamin E acetate used to dilute THC products is the cause (Aubrey and Kennedy, 2019)</li> <li>- if we determine switching to vaping isn't safer, it won't improve public health (Bosman, 2019)</li> <li>- the British health system believes vaping to be safer than smoking (Norcia, 2019)</li> <li>- the risk associated with metals present in the aerosolized liquids is &gt;300x lower than daily allowable limits suggesting vaping does not present a significant health risk in this regard (Farsalinos et al., 2015)</li> </ul>	<ul style="list-style-type: none"> <li>- many states and some individual cities are taking steps towards banning these products (Norcia, 2019)</li> <li>- propylene oxide and glycidol are both carcinogens found in e-liquids with concentrations around 0.4-0.6% (Sleiman et al., 2016)</li> <li>- vaping leads to rapid inflammation of lung cells even if there's no nicotine (Raloff, 2015)</li> <li>- studies compiled by Rahman (2015) suggest vaping is equally bad to smoking</li> <li>- there are significantly more free radicals in vapors (&gt;30 uM) than in traditional smoke (&lt;20 uM) (Rahman, 2015)</li> <li>-Nebraska has laws restricting you access, but no other laws on vaping (Bhalerao et al., 2019)</li> <li>-15-18% of tobacco users reported using both tobacco and vaping while 0% of</li> </ul>	<ul style="list-style-type: none"> <li>- controlled studies examined vaping in a well-ventilated indoor space showed a 20% increase in the presence of PAH (a carcinogen) in the air (Schober et al., 2014)</li> <li>- while exposure to secondhand smoke decreased 4% between 2015-2018, exposure to secondhand vaping increased by 8% over the same time span with 7% of that growth between 2017-2018 (Tan et al., 2019)</li> </ul>	<ul style="list-style-type: none"> <li>- taxing cigarettes by &gt;8 cents resulted in a decrease 7.3 packs per user per year between 1955-1988 while decreases of &lt;4 cents resulted in an increase of .8 packs per user across the same time period (Peterson et al., 1992)</li> </ul>	<ul style="list-style-type: none"> <li>- 27% of high school students and 10% of middle school students reported using e-cigarettes with 72% and 59% of those users specifically using flavored e-cigarettes focusing on mint, fruit, and sweet flavoring (Cullet et al., 2019)</li> <li>- JUUL committed to not fighting a flavor ban if the federal government went that direction (Norcia, 2019)</li> <li>- Phillip Morris and Juul are being sued for deceptive marketing tactics aimed at children (Roberts, 2019)</li> <li>- nicotine use by children ages 12-17 shows significant increases in likelihood of developing addictive tendencies (USDHHS, 2012)</li> <li>-88% of lifelong smokers tried cigarettes by age 18 (USDHHS, 2012)</li> <li>-a national panel concluded that vaping as a youth increases</li> </ul>

		<p>non-tobacco users used vaping (SBRCS, 2016) -76% of vapers reported using tobacco as well in Nebraska (SBRCS, 2016) -only 5 Nebraska colleges/universities have banned vaping products (SBRSC, 2016)</p>			<p>your likelihood of smoking in the future (Kaplan, 2018) - exposure to nicotine during adolescent development leads to long-term changes in psychological function and decision making (Goriounova and Mansvelder, 2012) - vaping overtook traditional tobacco use among teens in 2014 tripling from 4.5%-13.4% since 2013 (Raloff, 2015) - in 2014, there were still 10 states with no age restrictions on vaping (Raloff, 2015) - vaping leads to rapid inflammation of up to 60% of lung cells even if there's no nicotine (Raloff, 2015) -online regulations only require youths to check a box saying they're 18 to buy products (Raloff, 2015) -Nebraska is currently considering this change making them the 3<sup>rd</sup> state to raise the smoking age to 21 (Hawaii/California) (Pluhacek, 2017) -Nebraska has laws restricting you access,</p>
--	--	---	--	--	---

					<p>but no other laws on vaping (Bhalerao et al., 2019)</p> <p>-in England, youth users of vaping were more interested in flavors and smoke tricks than they were in the nicotine itself (Measham et al., 2016)</p> <p>- 22.3% of Nebraska youth reported using e-cigarettes compared to 21% reporting using tobacco products in 2015 (SBSRC, 2016)</p>
Economy benefits	<p>- JUUL spent \$11mil on ads campaigning to prevent the ban on e-cigs in SF before they gave up the fight (Norcia, 2019)</p> <p>- as a replacement for big tobacco, the vaping industry is expected to grow to \$5.1bil in 2018 (Kaplan, 2018)</p> <p>- between 2012-2013, Nebraska saw an increase in vaping product sales of \$275,000 correlated to an increase of \$57mil increase across the US (Loomis et al., 2016)</p> <p>- the total dollars spent on these products in Nebraska in 2013 was \$680,000 (Loomis et al., 2016)</p>	<p>- Due to the bans on vaping products, many “mom n pop” vaping shops have been preemptively closing (Norcia, 2019)</p> <p>- the \$57 mil spent on vaping in the US in 2013 is a small number compared to the billions spent on traditional tobacco (Loomis et al., 2016)</p> <p>- 37% of vape users indicate that they view vaping as complimentary to their smoking rather than as a substitute for smoking reducing the cost saving potential by 57% or \$4.2-6.9bil annually (Doyle et al., 2015)</p>	-banning the use of cigarettes indoors did not impact the tobacco economy (Erickson and Chaloupka, 2007)	<p>- taxing cigarettes by &gt;8 cents resulted in a decrease 7.3 packs per user per year between 1955-1988 while decreases of &lt;4 cents resulted in an increase of .8 packs per user across the same time period (Peterson et al., 1992)</p>	<p>- tobacco companies spent \$9.94bil on cigarette ads in 2008, 54% more than in 1998 (including a 277% increase in smokeless tobacco advertising) following efforts by government agencies to reduce the number of child smokers (USDHHS, 2012)</p> <p>- ~350,000 of the 900,000 youths who smoke their first cigarette were deterred from smoking by “The Real Cost” federal programs (Farrelly et al., 2017)</p> <p>- Raising the smoking age to 21 would cost Nebraska \$4.7mil in tax</p>

	- 37% of vape users indicate that they view vaping as complimentary to their smoking rather than as a substitute for smoking reducing the cost saving potential by 57% or \$4.2-6.9bil annually (Doyle et al., 2015)				revenue annually (Pehuceck, 2017) - cigarette sales continued to outpace the \$2.5bil vaping market in 2015, and vaping sales showed a slight decline since 2014 but growth in sales to youth continued to grow (Marynak et al., 2017)
Costs of health care decrease	-the problem is that switching from traditional to electronic cigarettes ultimately does not typically result in the cessation of smoking altogether (Bhalerao et al., 2019)				-US taxpayers pay billions each year in medical care and lost productivity due to smoking (Pehucek, 2017)
Options to reduce tobacco use maintained	- anecdotal examples show that vaping did help reduce cigarette use (Giles, 2019)				
Freedom of choice maintained	- ~350,000 of the 900,000 youths who smoke their first cigarette were deterred from smoking by “The Real Cost” federal programs (Farrelly et al., 2017)				

Aubrey, A., & Kennedy, M. (2019, November 8). CDC finds possible culprit in outbreak of vaping-related lung injuries. Retrieved from <https://www.npr.org/sections/health-shots/2019/11/08/777646890/cdc-finds-possible-culprit-in-outbreak-of-vaping-related-lung-injuries>

Bhalerao, A., Sivandzade, F., Archie, S.R., & Cuculoo, L. (2019, October). Public health policies on e-cigarettes. Retrieved from <https://link.springer.com/article/10.1007/s11886-019-1204-y>

Bosman, J. (2019, October 14). He tried e-cigarettes to quit smoking. Doctors say vaping led to his death. Retrieved from <https://www.nytimes.com/2019/10/14/us/vaping-victim.html>

- Cullen, K.A., Gentzke, A.S., Sawdey, M.D., Chang, J.T., Anlc, G.M., Wang, T.W., Creamer, M.R., Jamal, A., Ambrose B.K., & King, B.A. (2019, November 5). e-cigarette use among you in the United States, 2019. Retrieved from <https://jamanetwork.com/journals/jama/fullarticle/2755265?appId=scweb>
- Doyle, C., Ronayne, D., & Sgroi, D. (2015, October). E-cigarettes: The extant and impact of complimentary dual-use. *Warwick Economics Research Paper Series 1064*, 1-36.
- Erickson, M., & Chaloupka, F. (2007). *CA 57*, 367-378.
- Farsalinos, K.E., Voudris, V., & Poulas, K. (2015, May 15). Are metals emitted from electronic cigarettes a reason for health concern? A risk-assessment analysis of currently available literature. *International Journal of Environmental Research of Public Health 12(5)*, 5215-5232.
- Farrelly, M.C., Duke, J.C., Nonnemaker, J., MacMonegle, A.J., Alexander, T.F., Zhao, X., Delehanty, J.C., Rao, P., & Allen, J.A. (2017, January 20). Association between The Real Cost media campaign and smoking initiation among youths – United States, 2014-2016. Retrieved from <https://www.cdc.gov/mmwr/volumes/66/wr/mm6602a2.htm#suggestedcitation>
- Giles, C. (2019, November 14). Artisanal vapers? For some, the habit’s about much more than quitting tobacco. Retrieved from <https://www.npr.org/sections/health-shots/2019/11/14/778936628/artisanal-vapers-for-some-the-habits-about-much-more-than-quitting-tobacco>
- Goriounova, N.A., & Mansvelder, H.D. (2012, December). Short- and long-term consequences of nicotine exposure during adolescence for prefrontal cortex neuronal network function. *Cold Spring Harbor Perspectives in Medicine 2(12)*, a012120.
- Kaplan, S. (2018, January 24). Vaping can be addictive and may lure teenagers to smoking, science panel concludes. Retrieved from <https://www.nytimes.com/2018/01/23/health/e-cigarettes-smoking-fda-tobacco.html>
- Loomis, B.R., Rogers, T., King, B.A., Dench, D.L., Gammon, D.G., Fulmer E.B., & Agaku, I.T. (2016, January). National and state-specific sales and prices for electronic cigarettes-U.S., 2012-2013. *American Journal of Preventative Medicine 50(1)*, 18-29.
- Maesham, F., O’Brien, K., & Turnbull, G. (2016, May 15). “Skittles & Red Bull is my favourite flavor”: E-cigarettes, smoking, vaping and the changing landscape of nicotine consumption among British teenagers – implications for the normalization debate. *Drugs: Education, Prevention and Policy 23(3)*, 224-237.
- Marynak, K.L., Gammon, D.G., King, B.A., Loomis, B.R., Fulmer E.B., Wang T.W., & Rogers, T. (2017, July). National and state trends in sales of cigarettes and e-cigarettes, U.S., 2011-2015. *American Journal of Preventative Medicine 53(1)*, 96-101.
- McIntyre, W., & McIntyre, D. (2019, October 25). Behind the scenes of CDC’s vaping investigation. Retrieved from [npr.org/sections/health-shots/2019/10/25/773138356/behind-the-scenes-of-cdcs-vaping-investigation](https://www.npr.org/sections/health-shots/2019/10/25/773138356/behind-the-scenes-of-cdcs-vaping-investigation)
- Norcia, A. (2019, October 15). A running list of US cities and states where vapes are banned. Retrieved from [https://www.vice.com/en\\_us/article/9keg7v/where-are-vapes-banned-rhode-island-michigan-washington-oregon-massachusetts-vape-laws-2019](https://www.vice.com/en_us/article/9keg7v/where-are-vapes-banned-rhode-island-michigan-washington-oregon-massachusetts-vape-laws-2019)
- Peterson, D.E., Zeger, S.L., Remington, P.L., & Anderson, H.A. (1992). The effect of state cigarette tax increases on cigarette sales, 1955-1988. *American Journal of Public Health 82(1)*, 94-96.
- Pluhacek, Z. (2017, February 13). Nebraska’s smoking age would rise to 21 under proposal. Retrieved from [https://journalstar.com/legislature/nebraska-smoking-age-would-rise-to-under-proposal/article\\_7de38646-65bd-5c46-b493-a1d24ffe8b36.html](https://journalstar.com/legislature/nebraska-smoking-age-would-rise-to-under-proposal/article_7de38646-65bd-5c46-b493-a1d24ffe8b36.html)
- Raloff, J. (2015, June 29). The dangers of vaping: Teens are falling for flavored e-cigs, but the vapors they inhale may be toxic. Retrieved from <https://onlinelibrary.wiley.com/doi/full/10.1002/scin.2015.188001019>
- Roberts, C. (2019, September 19). Secondhand vaping: The latest vaping related health risk. Retrieved from <https://www.cnet.com/news/secondhand-vaping-the-new-health-risk-you-didnt-even-know-was-an-issue/>
- SBSRC. (2016). Data and trends on tobacco use in Nebraska 2016. Retrieved from [www.dhhs.ne.gov](http://www.dhhs.ne.gov)
- Schober, W., Szendrei, K., Matzen, W., Osiander-Fuchs, H., Heitmann, D., Schettgen, T., Jorres, R.A., & Fromme, H. (2014, July). Use of electronic cigarettes (e-cigarettes) impairs indoor air quality and increases FeNO levels of e-cigarette consumers. *International Journal of Hygiene and Environmental Health 217(6)*, 628-637., 9644-9651.

Sleiman, M., Logue, J.M., Montesinos, N.N., Russell, M.L., Litter, M.I., Gundel, L.A., & Destailats, H. (2016, July 27). Emissionfs from electroinc cigarettes: Key parameters affecting the release of harmful chemicals. *Environmental Science and Technology* 50(17)

Tan, A.S.L., Bigman, C.A., Mello, S., & Sanders-Jackson, A. (2019, August). Trends in the prevalence of exposure to e-cigarette aerosol in public places among US middle and high school students, 2015 to 2018. *Journal of the American Medical Association Open Network* 2(8), e1910184.

USDHHS. (2012). Preventing tobacco use among youth and young adults: A report of the surgeon general. Retrieved from <https://www.hhs.gov/sites/default/files/preventing-youth-tobacco-use-exec-summary.pdf>

**Flood Management**

	Rebuilding dams/levees	Regulations to prevent or adapt construction on flood plains	Improved tech (retention ponds / drainage / modeling)	Dechannelization / flood plain expansion	
Reduce flood damage	<ul style="list-style-type: none"> <li>- rules set in 1969 essentially established that within the expected zone of a 100-year flood you can't build any structures that can't withstand flood damage but can farm with updated lines to be provided as new dams are constructed (Gilman 1969)</li> <li>- construction of dams/levees simply can't keep up with the rate of change that waterways are experiencing (Song et al., 2018)</li> <li>- 71% of Nebraska major disaster declarations since 1993 and 59% of the nation's major disaster declarations since 1999 have been due to floods, so clearly what we've been doing isn't working (Magnuson and Duerig, 2019)</li> <li>- USACE was just given \$1bil to specifically rebuild dams and levees in the Midwest including</li> </ul>	<ul style="list-style-type: none"> <li>- as early as 1969, it was recognized that development was occurring in areas where managing flooding is not economically or technologically possible (Gilman 1969)</li> <li>- regulations prevent the future harm to human life (Gilman 1969)</li> <li>- rules set in 1969 essentially established that within the expected zone of a 100-year flood you can't build any structures that can't withstand flood damage but can farm with updated lines to be provided as new dams are constructed (Gilman 1969)</li> <li>- requiring farmers to plant winter cover crops will reduce soil erosion during spring floods (USGRCP, 2018)</li> <li>- 41 million people put themselves at risk of flooding by building within floodplains in</li> </ul>	<ul style="list-style-type: none"> <li>- models relying on old data simply can't keep up with the climate alterations to waterways (Song et al., 2018)</li> <li>- in order to successfully adapt to future changes, we need models that are predicting climate changing variables (USGRPC, 2018)</li> <li>- cities like New York and Miami are using new improved models to raise the levels of levees, streets, and buildings with future climate change issues in mind (USGRCP, 2018)</li> <li>- new models produced by researchers from the U.K. showed 41 million people live in the 1% probability floodplain in the U.S. compared to old FEMA models that said only 13million people (Wing et al., 2018)</li> <li>- the new "Rain for Rent" DV600c Pump can redirect up to 28,000 gallons per</li> </ul>	<ul style="list-style-type: none"> <li>- dry dams essentially control where floodplains will exist (CPNRD, n.d.)</li> <li>- an option is to pursue the acquisition / demolition and relocation of individuals in flood plains (NDNR, 2013)</li> <li>- natural floodplains help reduce flood risk by slowing runoff and storing flood water (FEMA, 2018)</li> <li>- 1 acre of floodplain with 1 foot of water on it will store 330,000 gallons of water (FEMA, 2018)</li> <li>- buyouts expand floodplains and remove risk for users at market values (NWF, n.d.)</li> </ul>	

	Nebraska (Stewart, 2019)	the U.S. (Wing et al., 2018) - a stated objective of NDNR is to support initiatives that protect or exclude human habitation in flood zones (NDNR, 2013) - a needed action is to actually enforce current floodplain restrictions (NDNR, 2013) - another good action would be to change building code restrictions and inspections to improve buildings in flood plains (NDNR, 2013)	minute of rainfall and was used to protect Omaha from flooding during the College World Series (Rain for Rent, n.d.) - retention ponds at Lewis and Clark Lake are currently only capable of holding back 1% of the amount of water that was dumped there by the 2019 floods (Yoders, 2019) - a stated objective of the NDNR is to improve flood warning systems (NDNR, 2013) -development of retention ponds where feasible would be beneficial (NDNR, 2013)		
Maintain resource equity	- levees are typically built to protect affluent communities leaving others to suffer (Song et al., 2018) - some dams are privately owned in Nebraska, which means that private individuals are required to do the upkeep of dams resulting in those dams not being maintained and endangering many people because dam repairs can't be afforded by these	- requiring farmers to plant winter cover crops will reduce soil erosion during spring floods helping downstream folks and allowing earlier access to fields (USGRCP, 2018)	- coordination with NDeptRoads could minimize influence on user groups by coordinate road construction with flood mitigation (NDNR, 2013)	- Flooding resulted in the loss of \$400-450mil in Nebraska in 2019; if the floodplains are expanded, this is who will suffer economically (Magnuson and Duerig, 2019) - tribal nations rely on natural resources and expanding floodplains would protect them (USGRCP, 2018)	



	individuals (USDA NRCS, 2019)				
Conserve / restore wildlife	<p>-dams expand wetland habitats for wildlife (USDA NRCS, n.d.)</p> <p>-\$2.5mil given to four NRDs in Nebraska will be used to curtail flooding as well as provide wetland restoration to protect endangered Salt Tiger Beetles (USDA NRCS, 2019)</p> <p>-4 of the 6 Army Corps reservoirs in Nebraska aren't capable of retaining sediment resulting in uninhabitable reservoirs (Yoders, 2019)</p> <p>- the construction of dams limits the natural flow of water thereby getting rid of floodplains that serve as important hotspots of biodiversity (Andreozzi, 2018)</p>	<p>- development in floodplains was shown to negatively impacts orca, salmon, steelhead, sea turtles, key deer, and other endangered species across several studies (NWF, n.d.)</p> <p>- the expansion of floodplains following Nebraska's 2019 floods actually increased habitat for wildlife without significantly harming populations (BonFluer, 2019)</p>	<p>- Development of retention ponds sets up a useful environmental habitat type (NDNR, 2013)</p> <p>- the expansion of floodplains following Nebraska's 2019 floods actually increased habitat for wildlife without significantly harming populations because there are many semi-aquatic predators that prefer habitats with many backwaters (BonFluer, 2019)</p>	<p>- dry dams require lands to be protected as floodplains, which ultimately provides habitat for wildlife until floods come and later recede (CPNRD, n.d.)</p> <p>- natural floodplains provide protected habitats for fish and wildlife and provide higher quality recreational opportunities such as fishing, bird watching, etc. and increase overall biodiversity (FEMA, 2018)</p> <p>- floodplain restoration provides improved habitat for fishes (NWF, n.d.)</p> <p>-floodplains are important hotspots of biodiversity (Andreozzi, 2018)</p>	
Conserve water for irrigation and drinking	<p>-dams store water that can be used for drinking and irrigation (USDA NRCS, n.d.)</p> <p>- storing water via the construction of dams can be highly expensive compared other water conservation options (Marsden Jacobs Associates, 2006)</p>	<p>- requiring farmers to plant winter cover crops will reduce soil erosion during spring floods and return more moisture to the soil (USGRCP, 2018)</p> <p>- restricting actions in floodplains, such as deforestation and agricultural practices</p>	<p>- improved water retention is vital to restoring aquifers because we are withdrawing 10x faster than the aquifers naturally replenish (USGRCP, 2018)</p> <p>- improved retention ponds and canals present a useful way to</p>	<p>- restoring floodplains is important for water retention and refilling aquifers used for agriculture (FEMA, 2018)</p>	

	<ul style="list-style-type: none"> <li>- expanding dams and reservoirs provided increased habitat for fish and other wildlife (Ahmad, 2017)</li> </ul>	<ul style="list-style-type: none"> <li>can help to increase water in these habitats protecting wildlife species that live in floodplains (Pagiola, 2003)</li> </ul>	<ul style="list-style-type: none"> <li>conserve water for human use (EPA, 2018)</li> <li>- new technology alone is unable to keep up with the rising demand for water, although it might be useful for flooding (National Water Commission, 2014)</li> </ul>		
Tax payer cost minimized	<ul style="list-style-type: none"> <li>- the Army Corps of Engineers argues that building levees is more cost effective than buying homes (Song et al 2018)</li> <li>- flooding is expected to result in \$500mil in damages annually by 2050 based off climate change predications (USGRCP, 2018)</li> <li>- 900 dams constructed across Nebraska as part of the Watershed Protection and Flood Prevention act saves Nebraska citizens \$37mil in damages annually (USDA NRCS, n.d.)</li> <li>- 41% of Nebraska's dams (which are built with a 50 year life expectancy) are &gt;50yrs old and rebuilding those dams will be extremely costly (Yoders, 2019)</li> </ul>	<ul style="list-style-type: none"> <li>- local governments aren't enforcing laws because they gain tax revenue when people construct new buildings/homes even if it's in flood plains (Song et al, 2018)</li> <li>- as early as 1969, it was recognized that development was occurring in areas where managing flooding is not economically or technologically possible (Gilman 1969)</li> <li>-flooding on the Mississippi and Missouri rivers led to \$5.7bil in damages in 2011</li> <li>- at present, 50yr or 100 yr floods would result in ~\$1trillion in damages in the U.S. (Wing et al., 2018)</li> <li>- switching to no-till agriculture increases water infiltration into</li> </ul>	<ul style="list-style-type: none"> <li>- Flooding at Offut Air Force Base was predicted in 2011, but nothing was done about the need for a \$11mil levee resulting in a 2019 flood resulting in damage that will cost taxpayers far more (Hasemyer, 2019)</li> <li>- Making decisions that are proactive may be costly up front but decrease costs following flooding disasters (Lempert et al., 2018)</li> </ul>	<ul style="list-style-type: none"> <li>- the Army Corps of Engineers argues that building levees is more cost effective than buying homes (Song et al 2018)</li> <li>- cities in Milwaukee and Michigan are actually dechannelizing having now realized that storm pipes create increased risk of damage following extreme floods (USGRCP, 2018)</li> </ul>	

		soils by 2-400% and decreases erosion by 95% (USDA NRCS, n.d.)			
--	--	--	--	--	--

Ahmad, S. (2017). How people are resolving to reduce water scarcity. Retrieved from <https://www.waterlogicaustralia.com.au/blog/reduce-water-scarcity/>

Andreoozi, H. (2018, February 2). Floodplain forests. Retrieved from <https://extension.unh.edu/resource/floodplain-forests>

BonFleur, B. (2019, April 24). Nebraska wildlife not severely impacted by floods, blizzard, experts say. Retrieved from <https://www.klknv.com/story/40362221/nebraska-wildlife-not-severely-impacted-by-floods-blizzard-experts-say>

CPNRD. (n.d.). Impact of flood risk reduction programs. Retrieved from <https://cpnrd.org/flood-control/>

EPA. (2018). Water efficiency for water suppliers. Retrieved from <https://www.epa.gov/sustainable-water-infrastructure/water-efficiency-water-suppliers#stormwater>

FEMA. (2018, October 17). Benefits of natural floodplains. Retrieved from <https://www.fema.gov/benefits-natural-floodplains>

Gilma, H.H. (1969). Flood plain regulation program in Nebraska: Questions & answers. *Historical Materials from University of Nebraska-Lincoln Extension*. 3915.

Hasemyer, D. (2019, Mar 21). U.S. military knew the flood risks at Nebraska's Offutt Air Force Base, but didn't act in time. Retrieved from <https://www.nbcnews.com/news/us-news/u-s-military-knew-flood-risks-nebraska-s-offutt-air-n985926>

Marsden Jacobs Associates. (2006). Securing Australia's urban water supplies: Opportunities and impediments. Retrieved from <http://media.theaustralian.news.com.au/water.pdf>

National Water Commission. (2014). National performance report 2012-13: Urban water utilities. Retrieved from: <https://apo.org.au/sites/default/files/resource-files/2014/04/apo-nid39162-1196926.pdf>

NDNR. (2013). Flood hazard mitigation plan. Retrieved from <https://nema.nebraska.gov/sites/nema.nebraska.gov/files/doc/flood-hazmit-plan.pdf>

NWF. (n.d.). Protecting floodplains. Retrieved from <https://www.nwf.org/Our-Work/Habitats/Floodplains>

Pagiola, S. (2003). Can programs of payments for environmental services help preserve wildlife?. Retrieved from [https://vtechworks.lib.vt.edu/bitstream/handle/10919/66997/2495\\_Pagiola2003\\_Can\\_PES\\_preserve\\_wildlife.pdf?sequence=1&isAllowed=y](https://vtechworks.lib.vt.edu/bitstream/handle/10919/66997/2495_Pagiola2003_Can_PES_preserve_wildlife.pdf?sequence=1&isAllowed=y)

Rain for Rent. (n.d.). Case studies: Omaha flood control solution. Retrieved from <https://www.rainforrent.com/case/omaha-flood-control-solution/>

Song, L, Michels, P., & Shaw, A. (2018, August 6). Flood thy neighbor: Who stays dry and who decides? Retrieved from <https://www.propublica.org/article/levee-valley-park-flood-thy-neighbor-who-stays-dry-and-who-decides>

Stewart, S. (2019, October 3). Nebraska to receive Army Corps funds for levee repair projects. Retrieved from <https://www.omahadailyrecord.com/content/nebraska-receive-army-corps-funds-levee-repair-projects>

USDA NRCS. (2019, November 8). Funding approved for new watershed projects across Nebraska. Retrieved from <https://www.nrcs.usda.gov/wps/portal/nrcs/detail/ne/newsroom/releases/?cid=NRCSEPRD1508036>

USDA NRCS. (n.d.). Watershed structures prevent flooding damages. Retrieved from <https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/ne/newsroom/features/?cid=STELPRDB1167210>

USGCRP. (2018). Impacts, risks, and adaptation in the United States: Fourth national climate assessment, volume II. *U.S. Global Change Research Program*, Washington, D.C., pp1515.

Wing, O.E.J., Bates, P.D., Smith, A.M., Sampson, C.S., Johnson, K.A., Fargione, J., & Morefield, P. (2018, February 28). Estimates of present and future flood risk in the conterminous United States. *Environmental Research Letters* 13, e034023.