

# **Information design for the human brain**

**NICAR 2016, Denver,**

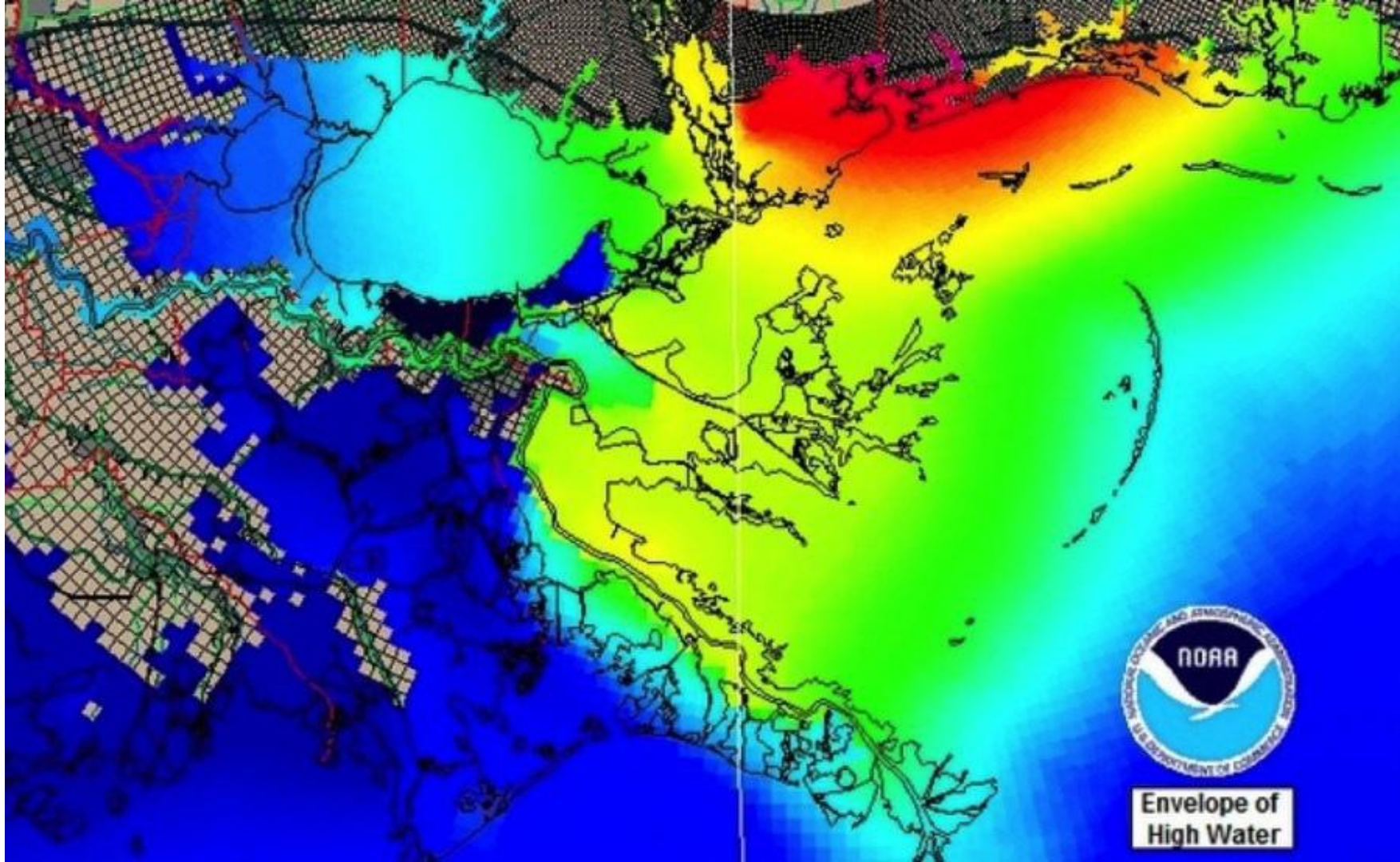
**Friday, March 11**

**Alexandra Kanik**

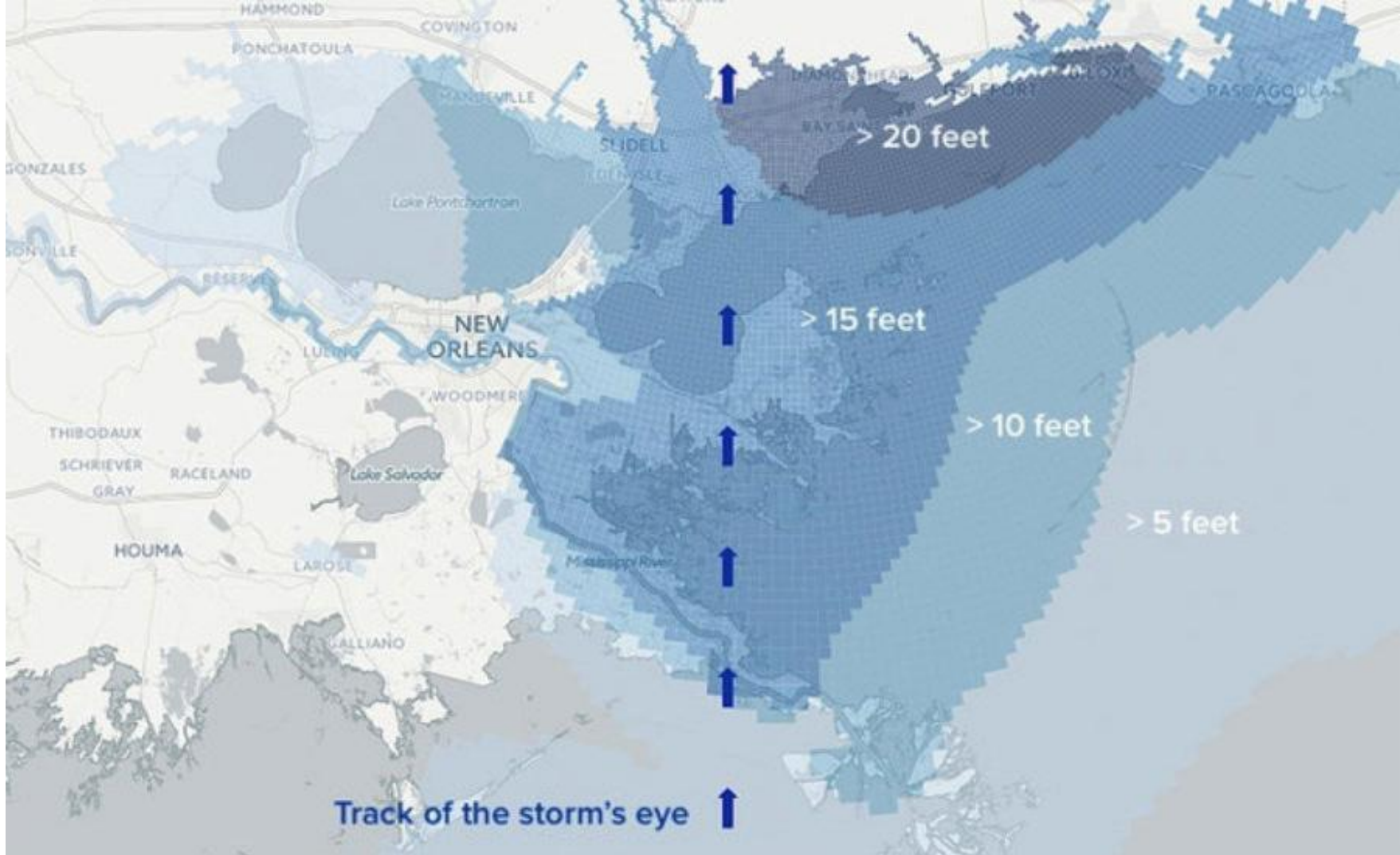
[@act\\_rational](https://twitter.com/act_rational)

**publicsource.org**  
**metricshift.org**

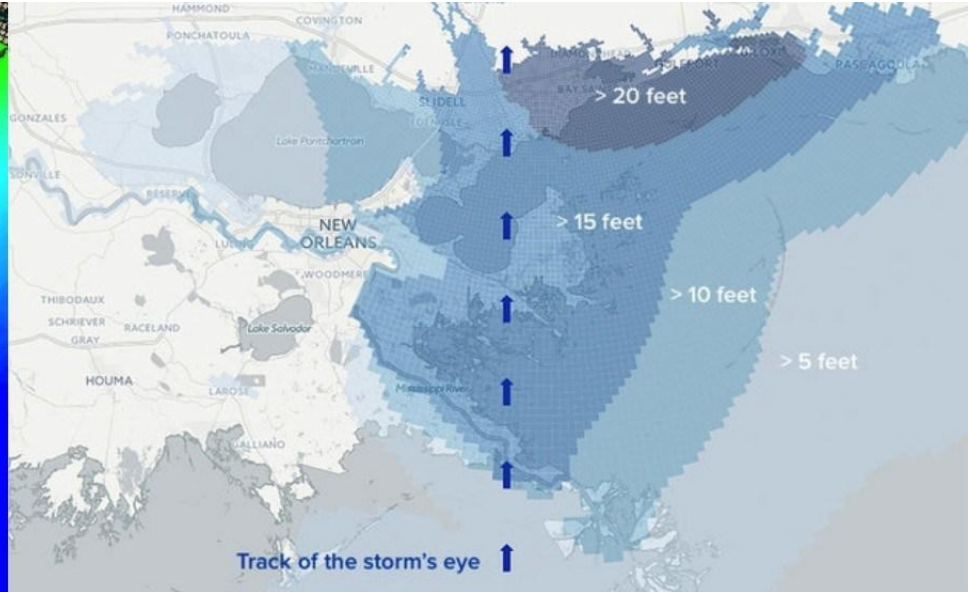
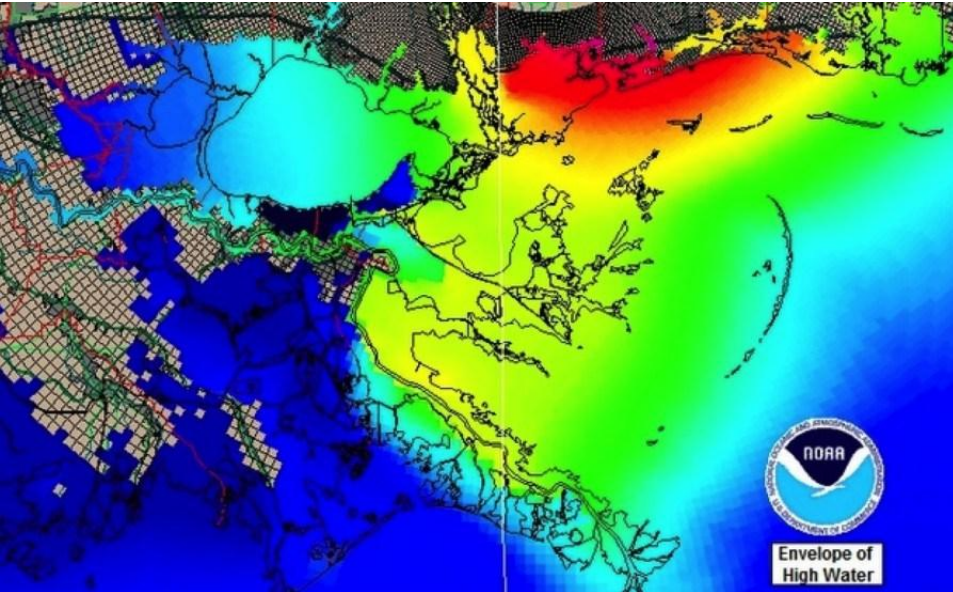
# THE IMPORTANCE OF COLOR

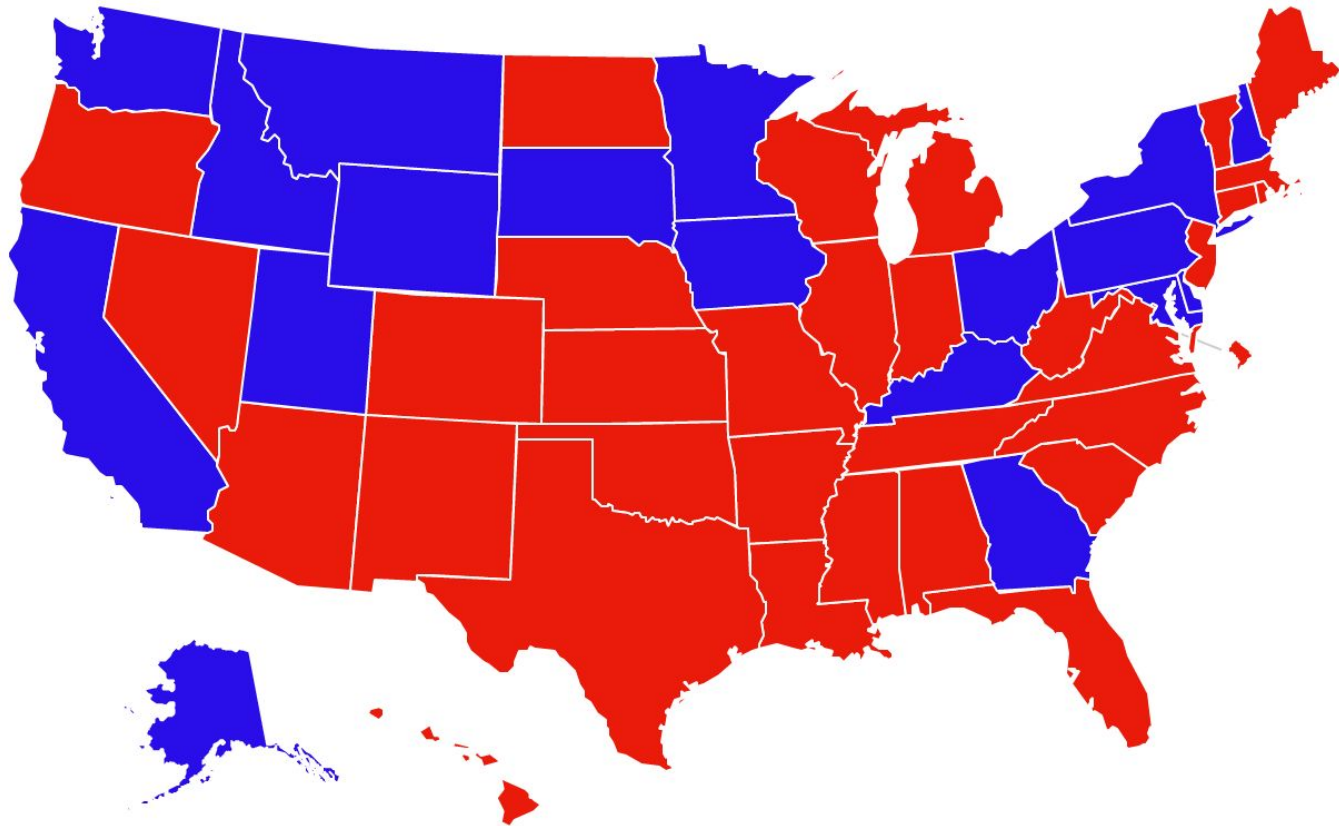


**Envelope of  
High Water**

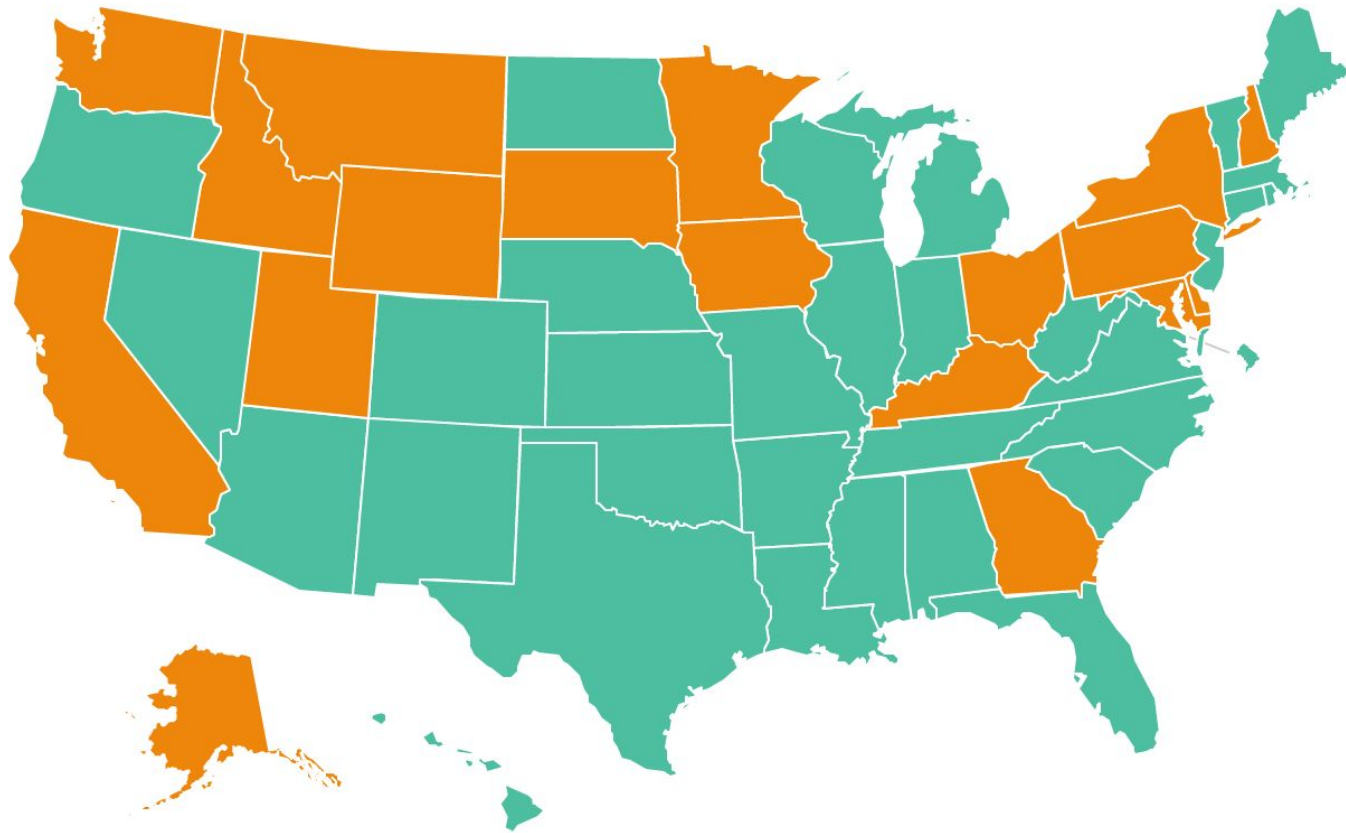


Don't make people's brains work harder than they have to.





■ Republican  
■ Democrat



Teal Republican  
Orange Democrat



# The Stroop Effect



**RED**

**RED**

# Say the words

Red

Red

Black

Black

Brown

Brown

Orange

Orange

Pink

Pink

Green

Green

# Say the colors



Red

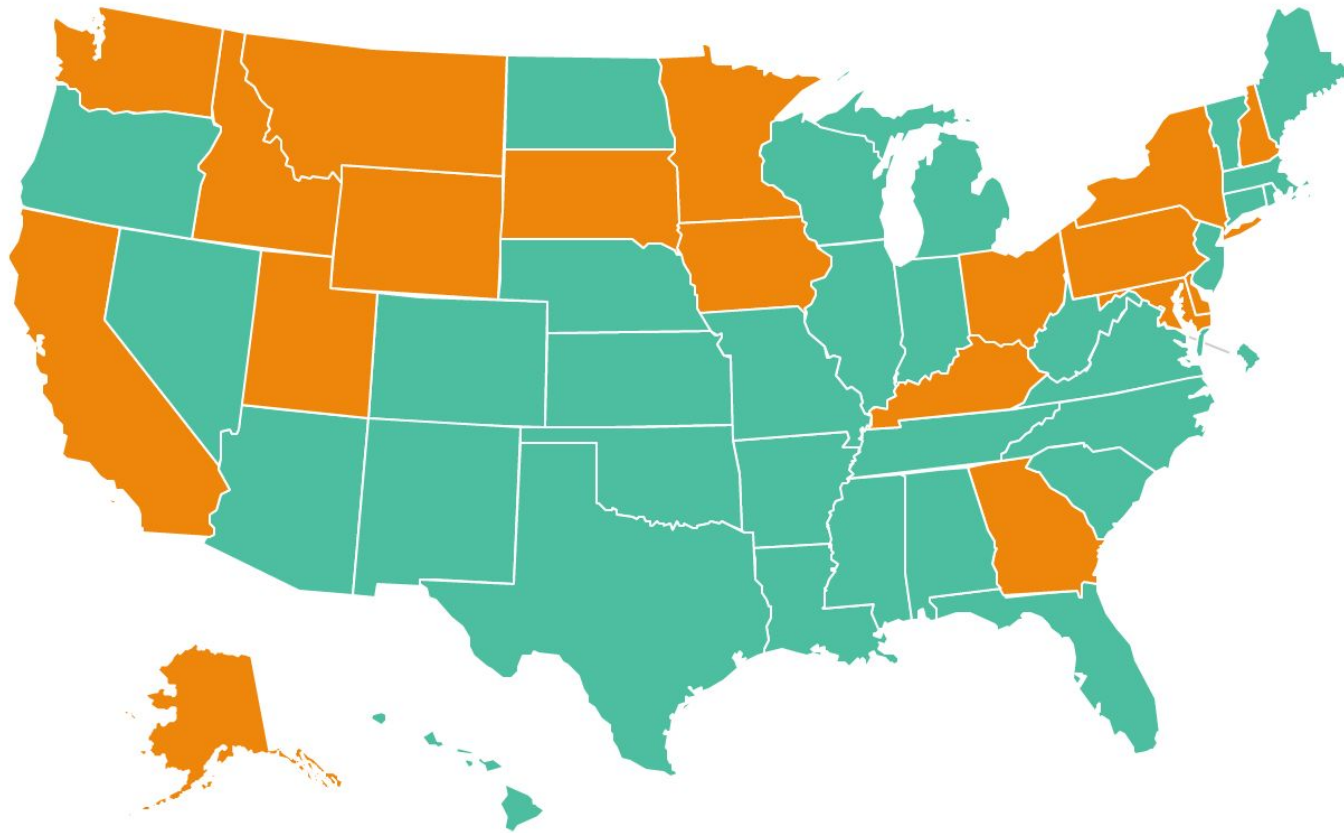
Black

Brown

Orange

Pink

Green



Teal Republican  
Orange Democrat



**VS.**



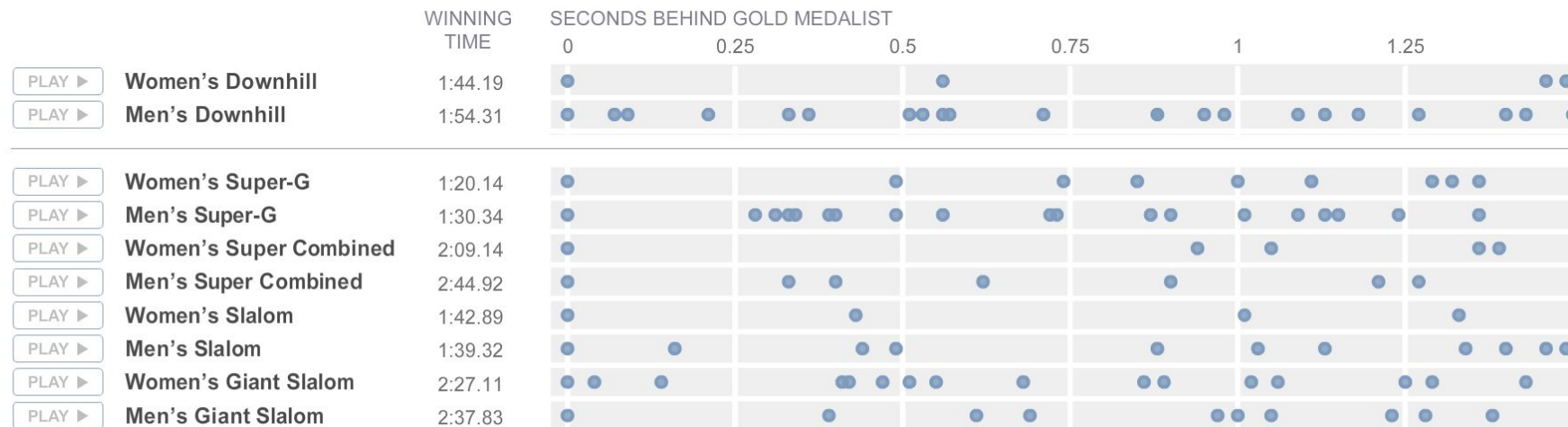
# Fractions of a Second: An Olympic Musical

At the Olympics, the blink of an eye can be all that separates the gold medalist from the 10th-place finisher. In some events, this is obvious. But in others, with athletes racing one by one, the closeness of the race is harder to perceive. Listen to the differences below.



## Alpine skiing

The women's downhill course was extremely tiring, and, because it was more challenging than the men's course, it ended up separating the skiers by much larger margins. This pattern appears in the two speed events: the downhill and the super-G.





Published: February 26, 2010

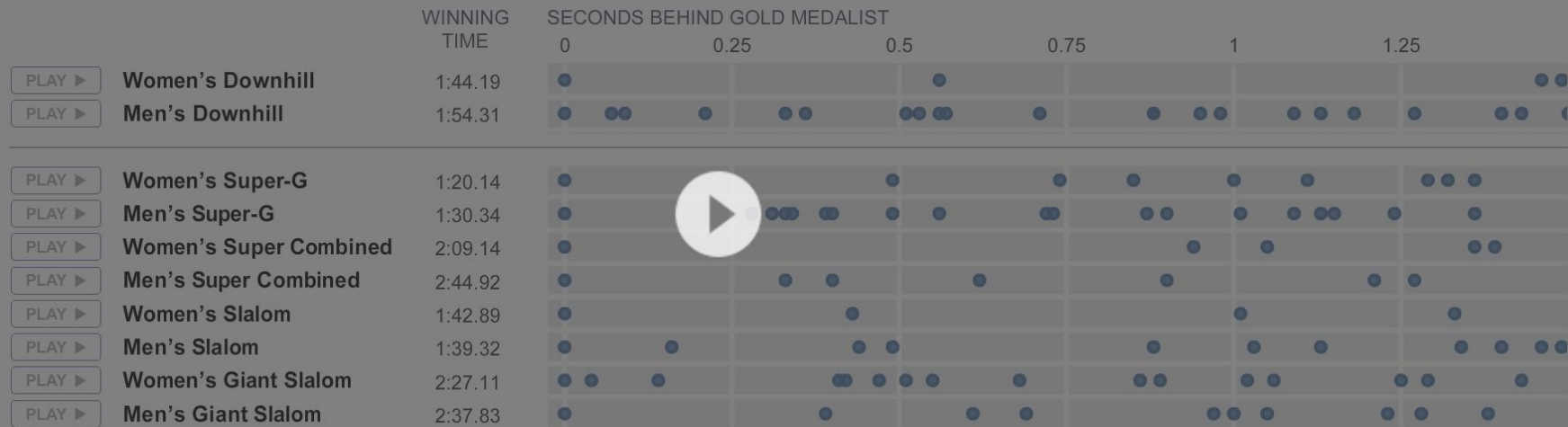
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### Alpine skiing

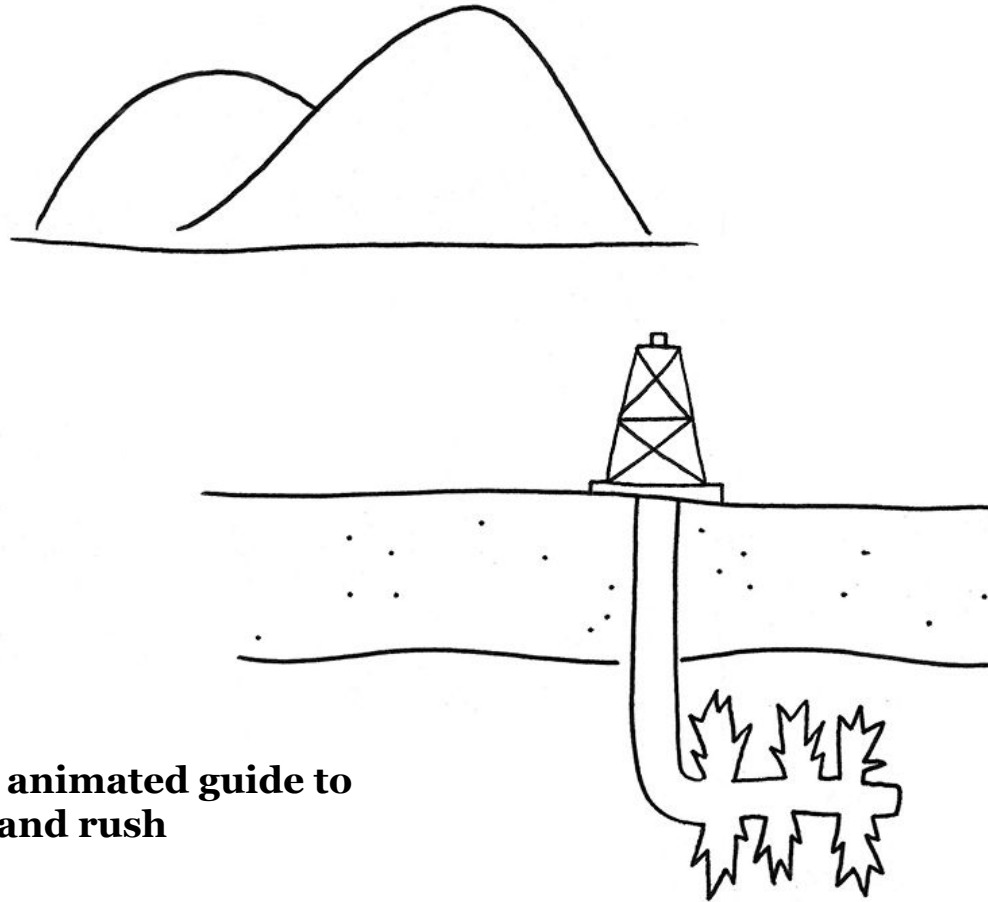
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Speaking of sequences...







**12 Sandy GIFs: An animated guide to Wisconsin's frac sand rush**

WisconsinWatch

# How Texas shifted from blue to red



GOVERNOR



LIEUTENANT  
GOVERNOR



ATTORNEY  
GENERAL



COMPTROLLER



U.S. SENATOR



U.S. SENATOR



LAND  
COMMISSIONER



AGRICULTURE  
COMMISSIONER

# Watch the Twin Cities grow from 1870 to present

Pioneer Press

## 1870s

This decade:

Properties: 1,672

Square feet: 2,622,750

Current value: \$223,903,000

Cumulative:

Properties: 1,672

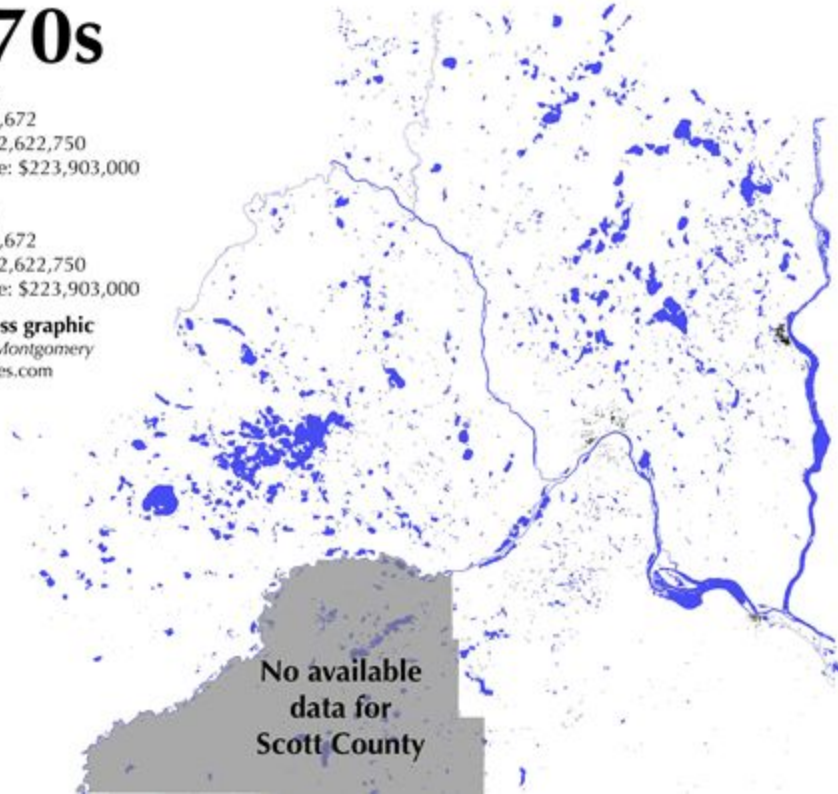
Square feet: 2,622,750

Current value: \$223,903,000

**Pioneer Press graphic**

*by David H. Montgomery*

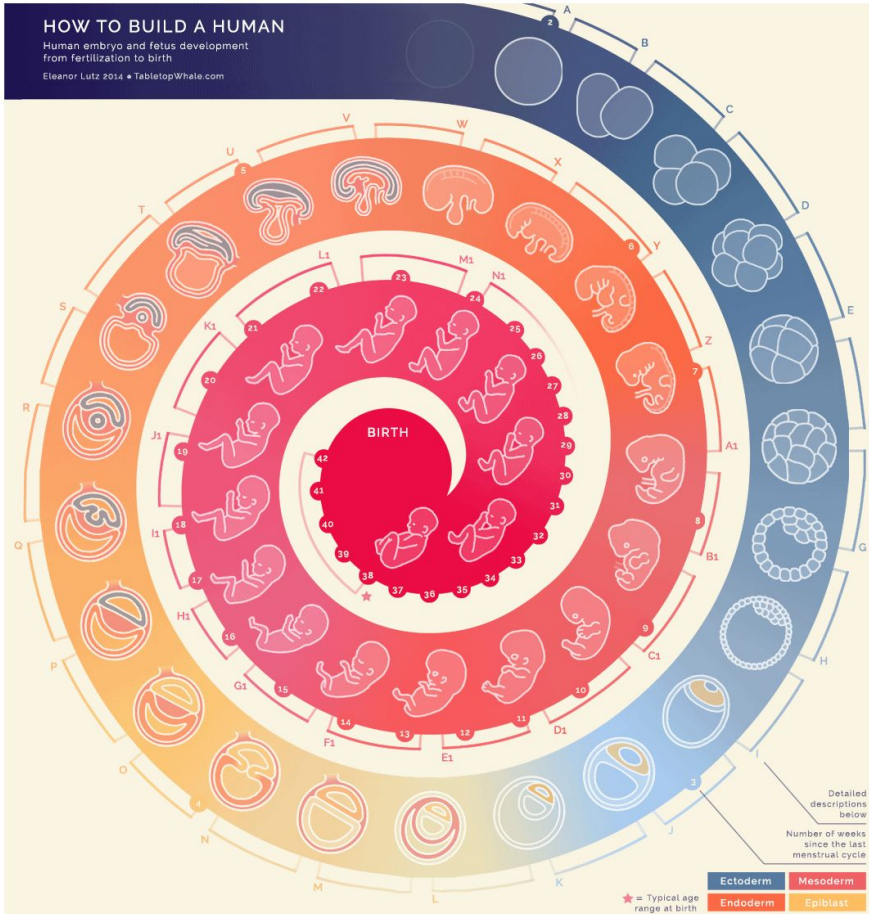
[www.twincities.com](http://www.twincities.com)



# HOW TO BUILD A HUMAN

Human embryo and fetus development  
from fertilization to birth

Eleanor Lutz 2014 • TabletopWhale.com



**A.** Fertilized egg  
**B.** 2-cell stage  
**C.** 4-cell stage  
**D.** 8-cell stage  
**E.** Compacted 8-cell  
**F.** Morula  
**G.** Blastocyst  
**H.** ICM growth

**I.** Bilaminar germ disk  
**J.** Amniotic cavity/yolk sac  
**K.** Implantation complete  
**L.** Extraembryonic mesoderm  
**M.** (Zoom)  
**N.** Hypoblast cells replaced  
**O.** Mesoderm immigration  
**P.** Ectoderm formation

**Q.** Primary neurulation  
**R.** Secondary neurulation  
**S.** Neurulation complete  
**T.** (Rotate view)  
**U.** Embryonic folding  
**V.** Primitive gut tube forms  
**W.** (Inside to outside view)  
**X.** Major blood vessels form

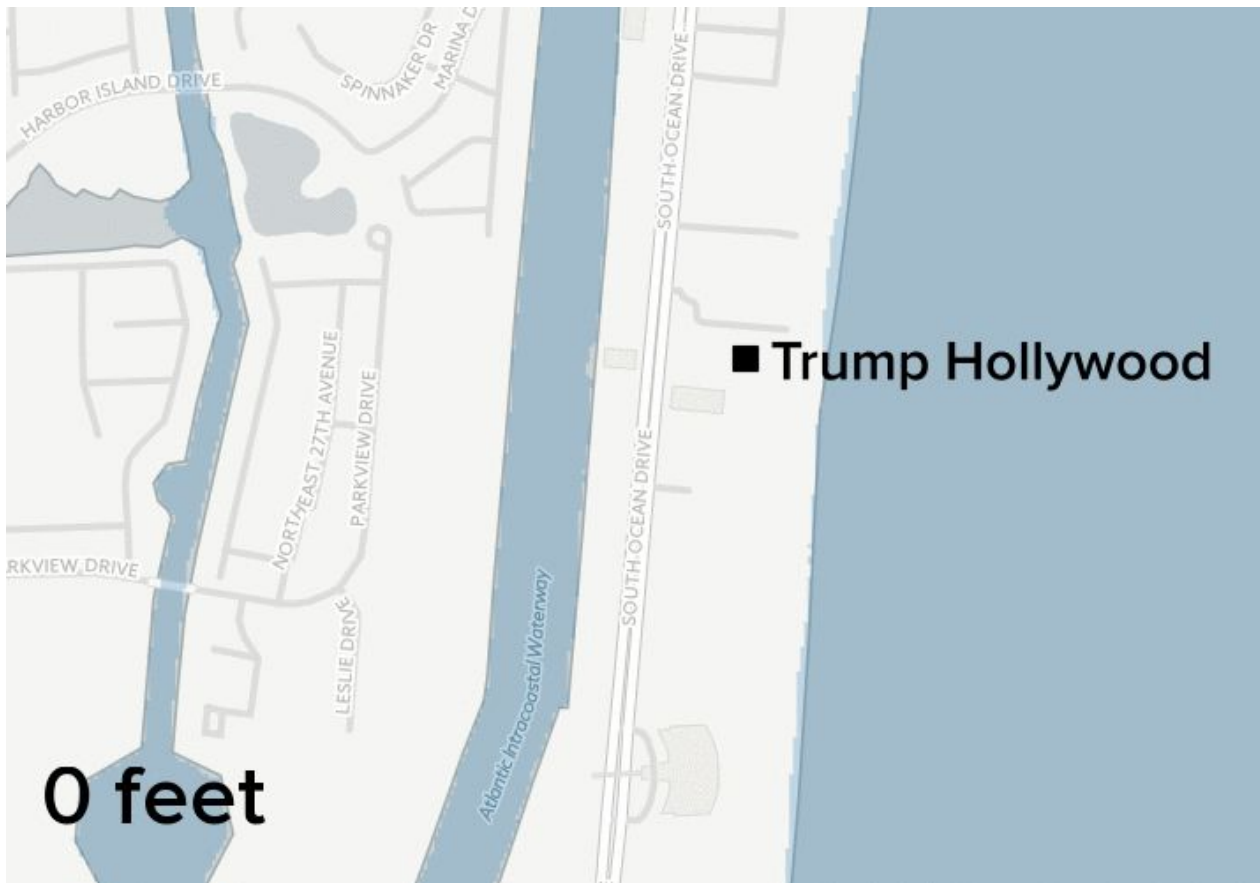
**Y.** Upper limb bud forms  
**Z.** Lower limb bud forms  
**A1.** Hand plate forms  
**B1.** Webbed fingers and toes  
**C1.** Fingers/toes separate  
**D1.** Gonads differentiate by sex  
**E1.** Eyelids form  
**F1.** Iris develops

**G1.** Second trimester  
**H1.** Taste pores develop  
**I1.** Fetus weighs about 100g  
**J1.** Vernix caseosa covers skin  
**K1.** Lanugo replaced by vellus  
**L1.** HPA axis established  
**M1.** Fetus weighs about 500g  
**N1.** >50% survival if born



# Donald Trump vs. Sea Level Rise

BuzzFeed



Lena Groeger's exhaustive [piece on animated gifs](#) touches on many more scientific benefits of the animated gif.

If you're a coder, here's a fun [command-line guide](#) on how to turn your screencast into an animated gif.

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