



FLINT, MI

- POPULATION – 102,434 (2010)
- 1908 - GENERAL MOTORS
 - BUICK
 - CHEVROLET
- BY LATE 1980'S – ECONOMIC DEPRESSION
 - GM CLOSED/DEMOLISHED PLANTS
- 2000'S – HIGH CRIME RATE
- 2011-2015 – FINANCIAL EMERGENCY (2ND)

FLINT WATER HISTORY

- 1917: 1ST WATER TREATMENT PLANT
- 1952: 2ND WATER TREATMENT PLANT
- 1962: PLANS FOR PIPE TO LAKE HURON
- 1964: NEW PLAN – BUY WATER FROM DETROIT
- 1967: PIPE FROM DETROIT COMPLETED
- AT PEAK – 200,000 PEOPLE & 100 MGD
- NOW – 99,000 PEOPLE & 16 MGD




FLINT WATER HISTORY

- MARCH 2013
 - CITY COUNCIL VOTES TO SWITCH FROM DETROIT WATER TO A NEW LAKE HURON SOURCE – KAREGNONDI WATER AUTHORITY (KWA – TO BE READY IN JUNE 2016)
 - APPROVED BY FLINT EMERGENCY MANAGER
 - APPROVED BY STATE TREASURER
- DETROIT WATER NOT HAPPY
 - GAVE FLINT 12 MONTHS TO FIND NEW SOURCE (BY APRIL 2014)

FLINT WATER HISTORY

- APRIL 2014
 - FLINT STARTS USING FLINT RIVER AS SOURCE (ALWAYS HAD BEEN BACK-UP)
 - PLAN TO SAVE \$5M OVER 2 YEARS
 - PLAN TO USE UNTIL JUNE 2016 WHEN KWA READY
 - ALMOST IMMEDIATELY – COMPLAINTS!
 - SMELL
 - COLOR
- DECEMBER 2014 – CITY SPENT \$4M ON WTP



FLINT RIVER

- JANUARY 2015
 - PUBLIC MEETING
 - COMPLAINTS ABOUT WATER
 - TASTE, SMELL, APPEARANCE
 - MICHIGAN DEQ INSISTED WATER SAFE TO DRINK
- MARCH 2015
 - CITY COUNCIL VOTES TO GET DETROIT WATER BACK
 - EMERGENCY MANAGER SAID NO
- AUGUST 2015
 - PETITION W/ 26,000 SIGNATURES TO MAYOR

FLINT WATER HISTORY

- SEPTEMBER 2015
 - TWO STUDIES RELEASED

HURLEY MEDICAL CENTER

- DR. MONA HANNA-ATTISHA
- PROGRAM DIRECTOR PEDIATRIC RESIDENCY
- POPULATION OF INFANTS/CHILDREN W/ELEVATED LEVELS OF LEAD HAD DOUBLED SINCE APRIL 2014 (WHEN SOURCE WATER SWITCHED TO FLINT RIVER)
- STUDY INITIALLY DISMISSED BY MICHIGAN DEQ
- "REPEATED TESTING INDICATED WATER TESTED WITHIN ACCEPTABLE LEVELS"



VIRGINIA TECH



- DR. MARC EDWARDS – PROF. CIVIL ENG
 - FLINT RIVER WATER "VERY CORROSIVE"
 - CAUSING LEAD CONTAMINATION IN HOMES
 - FLINT RIVER WATER LEACHES MORE LEAD FROM PIPES THAN DETROIT WATER DOES
 - SHOCKED BY LEAD LEVELS & INACTION OF AUTHORITIES
 - 25% HOMES LEAD > 15 PPB – SOME 13,200 PPB

FLINT WATER HISTORY

- OCTOBER 2015
 - BACK TO DETROIT WATER
- NOVEMBER 2015
 - 4 FAMILIES FILE LAWSUITS
 - US ATTY GEN & MI ATTY GEN INVESTIGATE
- DECEMBER 2015
 - ORTHOPHOSPHATE (CORROSION INHIBITOR) STARTED BE ADDED
- JANUARY 5, 2016
 - GOV. OF MI DECLARES STATE OF EMERGENCY
- JANUARY 16, 2016
 - PRES. OBAMA SIGNS DECLARATION

TESTING?

- EARLY 2015
 - CITY OFFICIALS SUBMIT REPORTS
 - "TESTS AT FLINT'S WATER TREATMENT PLANT HAD DETECTED NO LEAD AND TESTING IN HOMES HAD REGISTERED LEAD AT ACCEPTABLE LEVELS."
 - FALSE CLAIMS OF TESTING HOMES WITH LEAD SERVICE LINES (HIGHEST LEAD POISONING RISK)
- NOVEMBER 2015
 - CITY ADMITS IT DOESN'T KNOW WHERE LEAD SERVICE LINES ARE
 - RESULT WAS CITY AND STATE UNDERESTIMATED LEAD LEACHING INTO SYSTEM

STATUS TO DATE

- 6,000 – 12,000 RESIDENTS HAVE SEVERELY HIGH LEVELS OF LEAD IN THEIR BLOOD
- WATER SWITCH MAY BE A CAUSE OF LEGIONAIRES DISEASE OUTBREAK (10 DEATHS, 77 ILL)
- FOUR GOVERNMENT OFFICIALS RESIGN
 - 1 FROM CITY
 - 2 FROM MICHIGAN DEQ
 - EPA REGION 5 ADMINISTRATOR SUSAN HEDMAN

3 The Safe Drinking Water Act ("SDWA" or "Act") provides the U.S. Environmental
 4 Protection Agency ("EPA" or "Agency") with the authority to order actions when
 5 imminent and substantial endangerment exists and the actions taken by the state
 6 and/or local authorities are inadequate to protect public health. EPA has determined
 7 that the City of Flint¹ and the State of Michigan's responses to the drinking water
 8 crisis in Flint have been inadequate to protect public health and that these failures
 9 continue. As a result, EPA is issuing this SDWA Emergency Order ("Order") to make
 10 sure that the necessary actions to protect public health happen immediately. The
 11 Order requires that necessary information be provided promptly to the public in a