

# HIGH SYSTEM RESERVOIR

AUGUST 2020

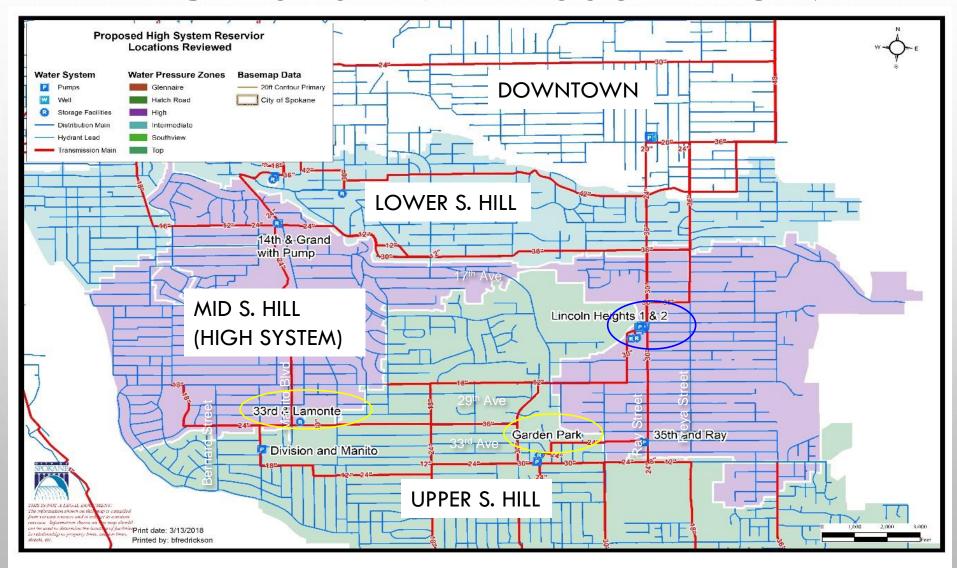


## PROJECT OBJECTIVES

A NEW RESERVOIR IS NEEDED IN THE HIGH SYSTEM PRESSURE ZONE:

- TO INCREASE SYSTEM RELIABILITY FIRE FLOW & PEAK DEMAND SUPPLY DURING THE SUMMER
- TO MEET DEPARTMENT OF HEALTH STANDARDS.
- TO IMPROVE THE WATER SYSTEM OPERATIONS IN HIGH PRESSURE ZONE AND ABOVE.

## HIGH SYSTEM PRESSURE ZONE



# RESERVOIRS CURRENTLY SERVING THE HIGH SYSTEM PRESSURE ZONE

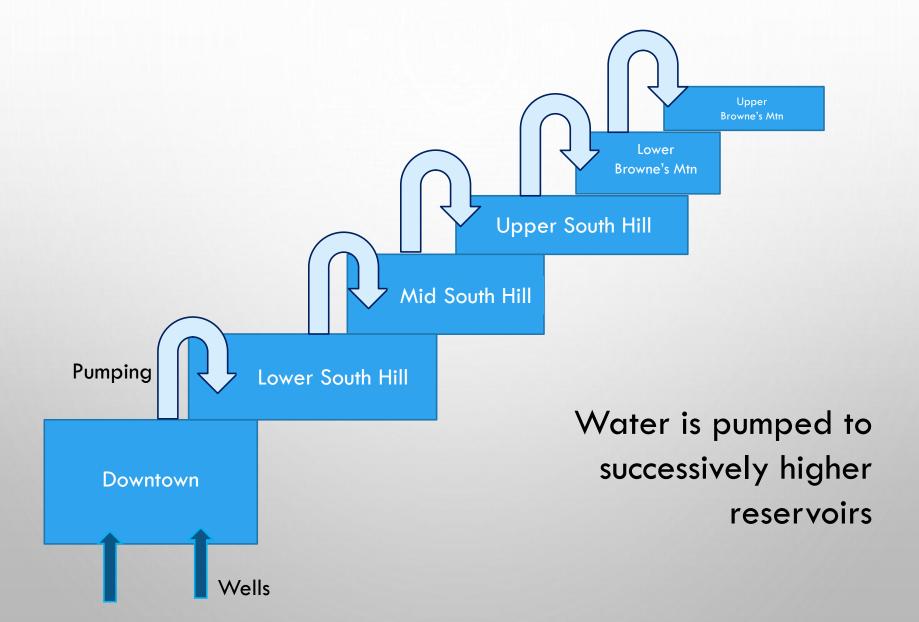


33<sup>rd</sup> & Lamonte 125 feet tall near Sacajawea

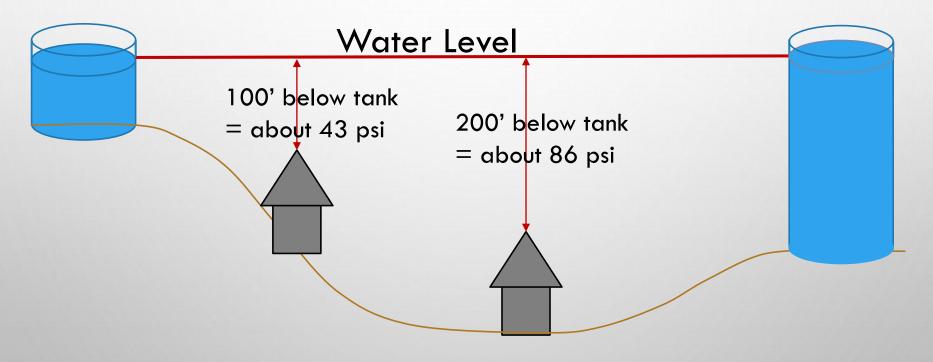


Garden Park at 37<sup>th</sup> Avenue near Stone Street 75 feet tall

### WATER SYSTEM BASICS



#### RESERVOIR ELEVATIONS AND PRESSURE

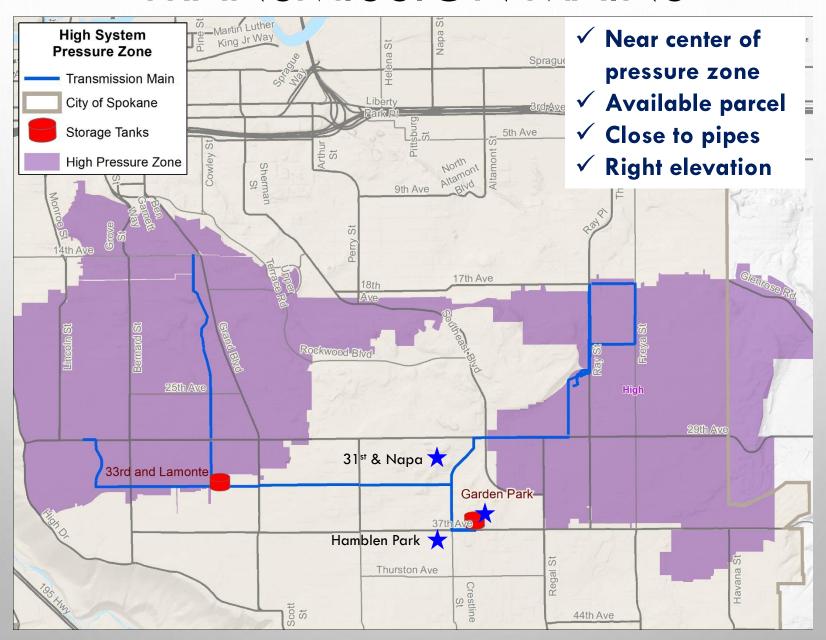


Homes and businesses must be between approx. 100' and 200' below tank water level

#### LOCATION SELECTION CRITERIA

- AVAILABLE PROPERTY (NOT MUCH VACANT LAND ON SOUTH HILL) AND IDEALLY PUBLICLY OWNED
- CLOSE TO TRANSMISSION MAINS WITHIN 5
   OR 6 BLOCKS
- THE WATER LEVEL IN THE PROPOSED RESERVOIR
   MUST MATCH ELEVATION OF THE OTHER
   RESERVOIRS
- NEAR THE CENTER OF THE PRESSURE ZONE

## TRANSMISSION MAINS







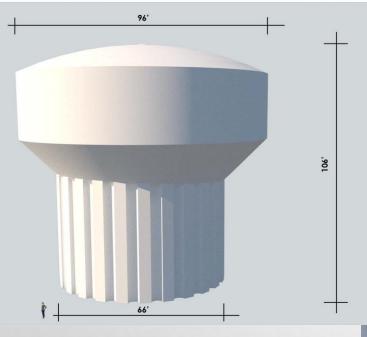




### RESERVOIR DIMENSIONS

- APPROX. 100' TALL (AT HAMBLEN PARK VARIES IN OTHER LOCATIONS)
- APPROX. 2 MILLION GALLON CAPACITY
- 50'-60' DIAMETER AT ITS BASE
- 100' TANK DIAMETER

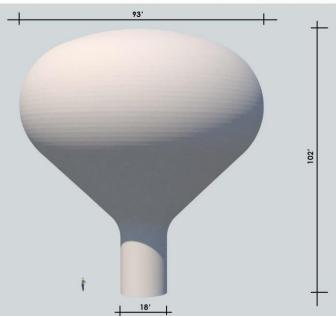
#### AVAILABLE RESERVOIR TYPES



Hydropillar

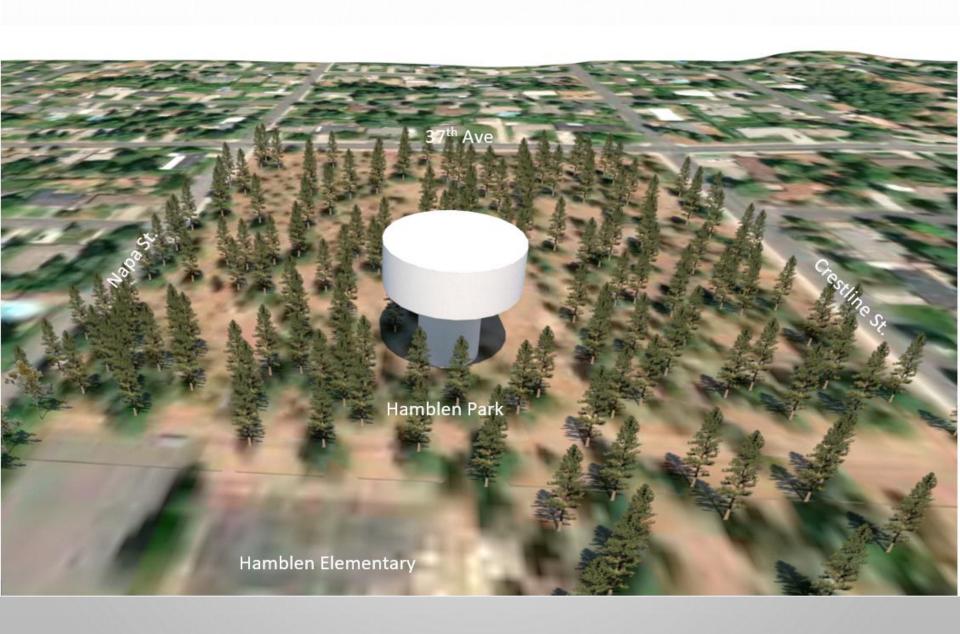


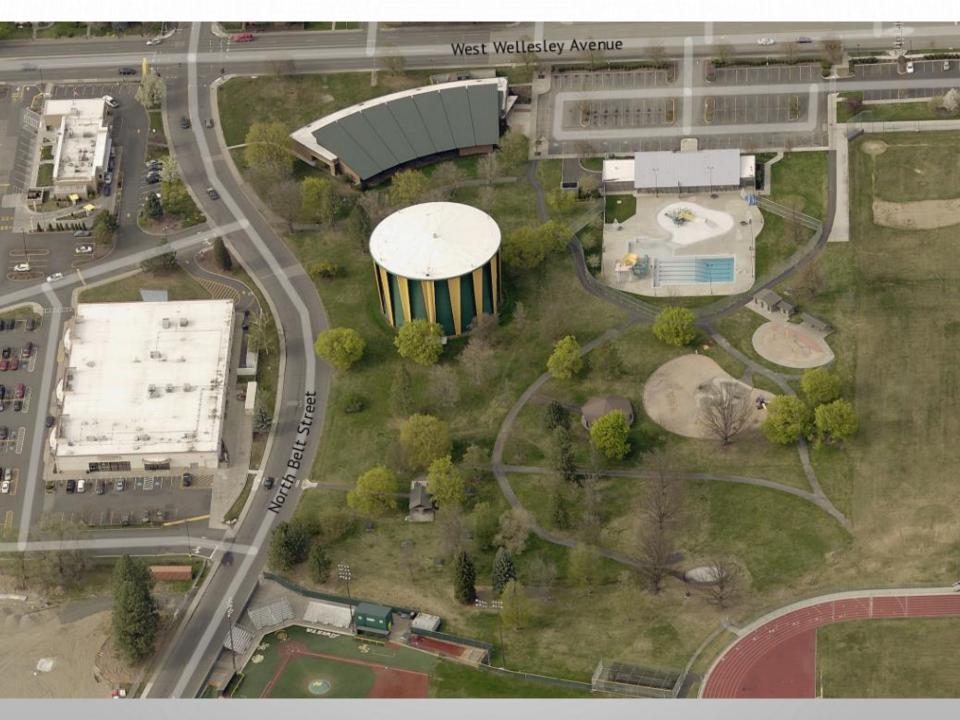
Standpipe



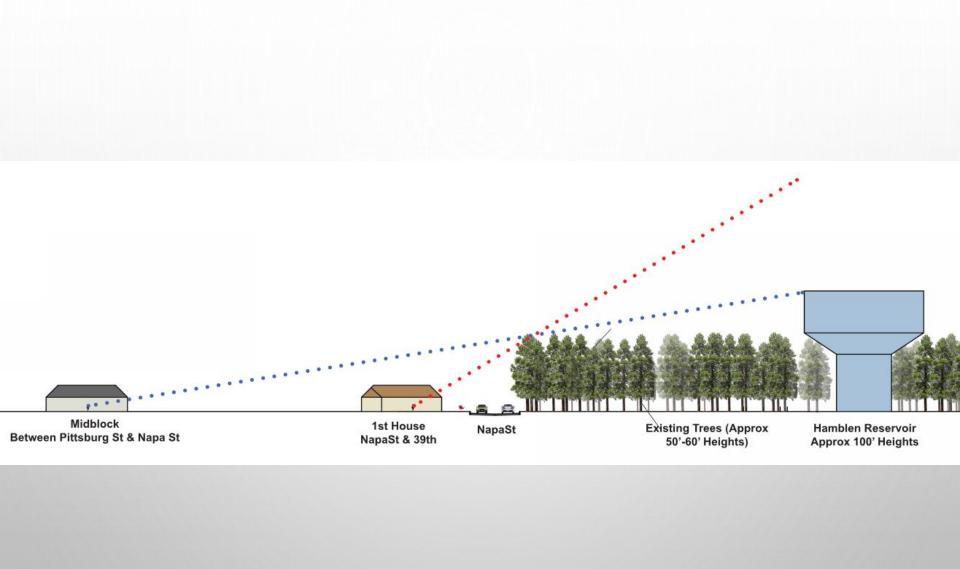
Water spheroid



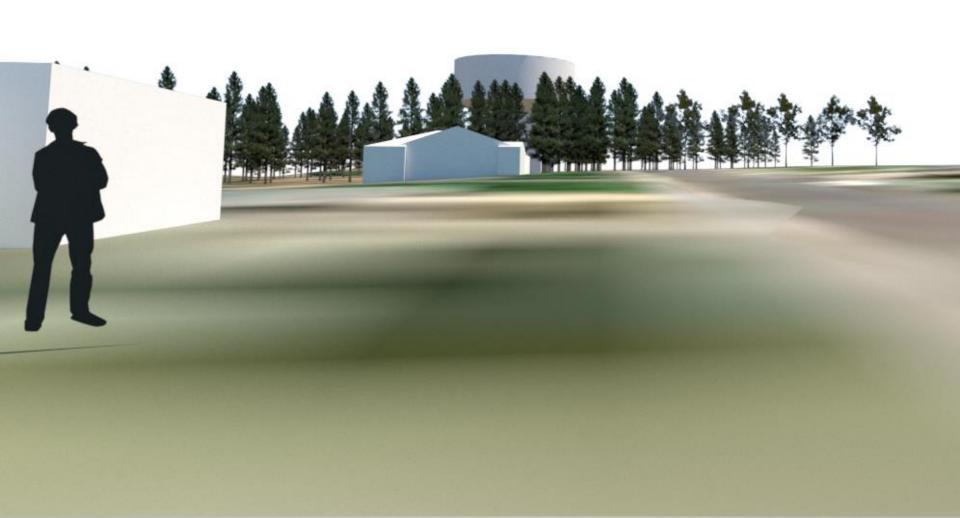












#### MITIGATION MEASURES

- START WITH HAMBLEN PARK, POSSIBLY INCLUDE OTHER PARKS
- THREE PARKS IN SOUTHGATE HAMBLEN, SOUTH COMPLEX, BEN BURR
- SOUTHGATE NEIGHBORHOOD PLAN PARKS AND OPEN SPACE ELEMENT (2010)



#### **Hamblen Park - Concept**

#### Existing

#### Shelter

Unimproved trail network

#### Proposed

Improvements to trail network Signage for trail network Park signage Entrance landscaping for transition from urban area to conservation land Bike racks along bike route Restroom facilities

#### PROJECT SCHEDULE & NEXT STEPS

- HOLD ANOTHER COMMUNITY MEETING ADVERTISED TO ALL RESIDENTS WITHIN A SEVERAL BLOCK RADIUS (LATE AUGUST)
- PERMITTING (FALL 2020)
- PROJECT DESIGN (FALL/WINTER 2020)
- CONSTRUCTION (2021-2022)

# **QUESTIONS?**