



# Building a Gravity Fed Spring System

*Wayward Springs Acres - 2021*



Sustainable Agriculture  
Research and Education





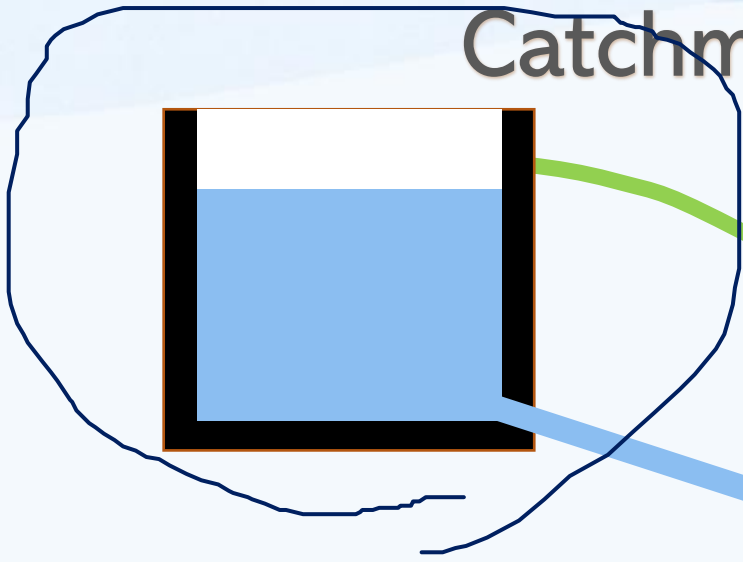


# Wayward Springs



# Components

Catchment Tank



Hillside

Hydrant

Pipeline

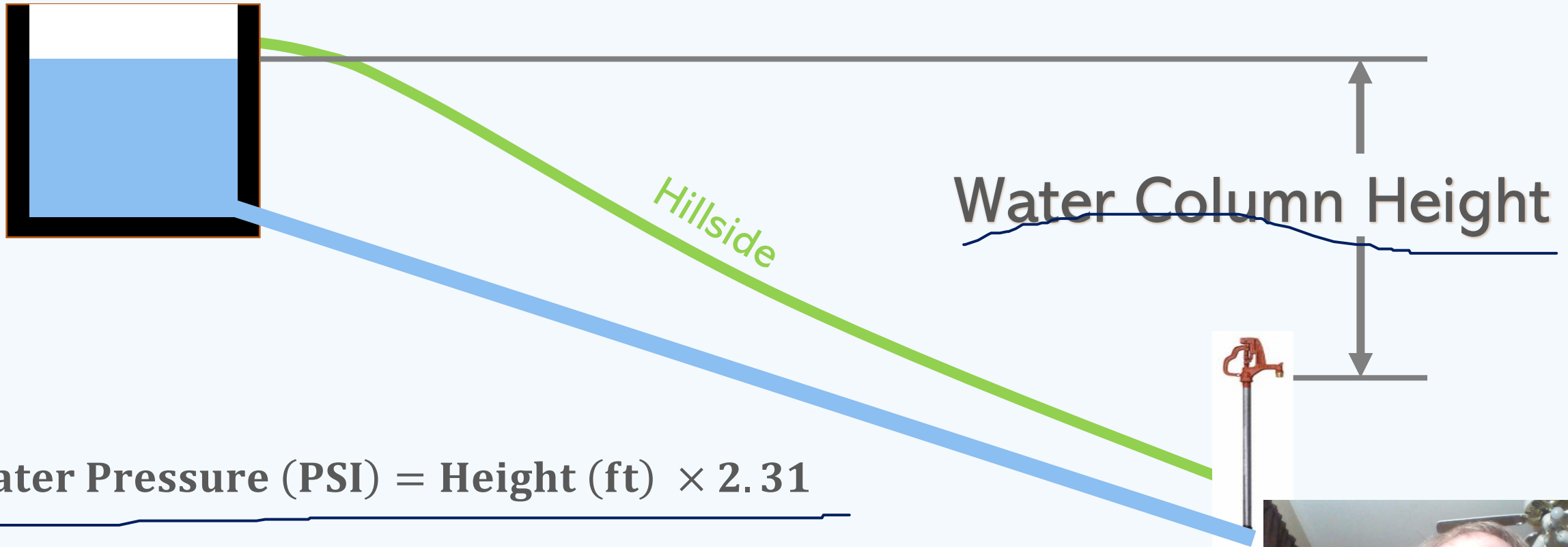








# Water Pressure (Static Pressure)



$$\text{Water Pressure (PSI)} = \text{Height (ft)} \times 2.31$$

$$\underline{34.7 \text{ PSI} = 15\text{ft} \times 2.31}$$

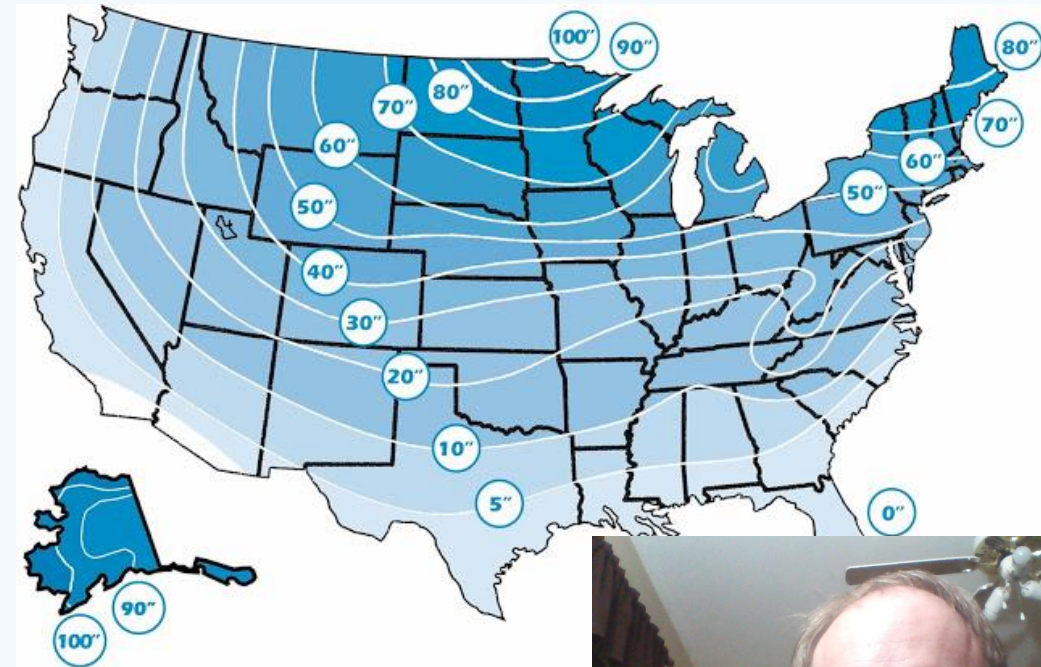






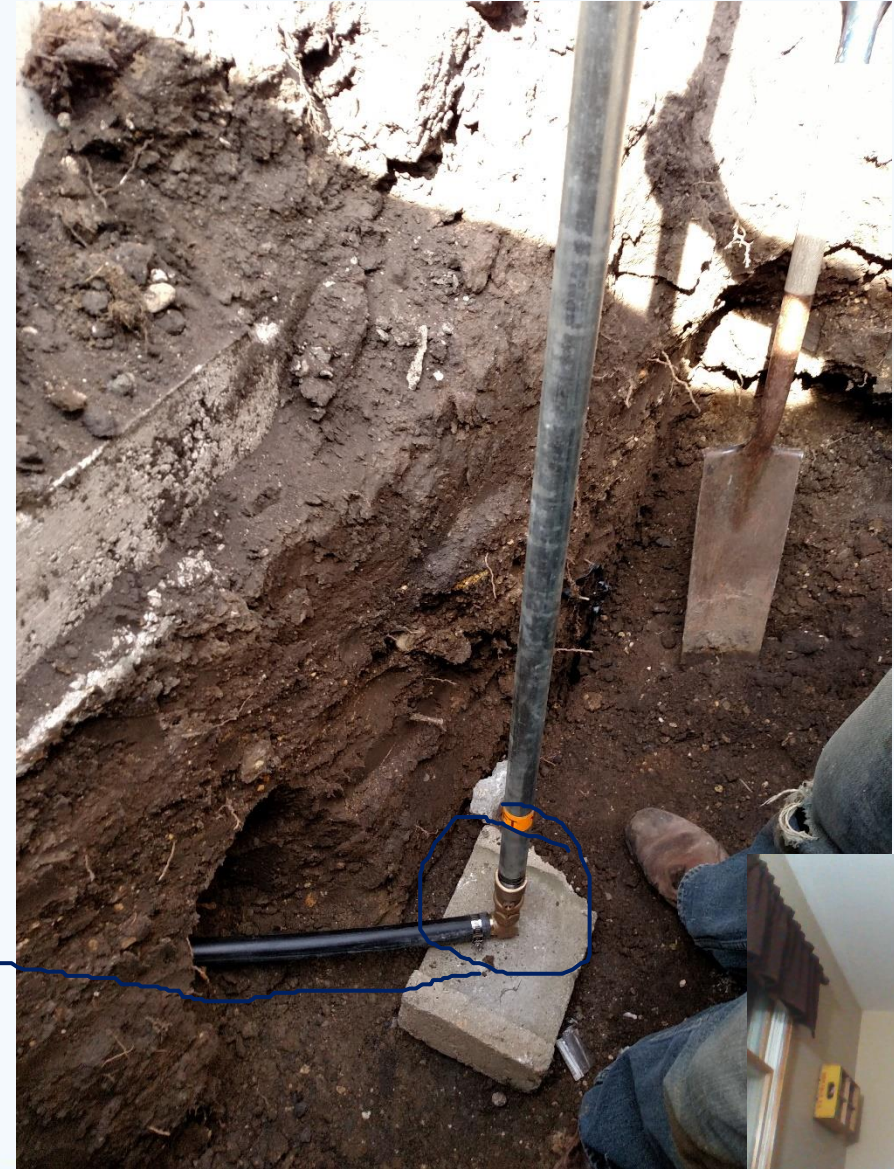
# Trenching

*Dig it deeper than your frost depth!*





# Installing Hydrant



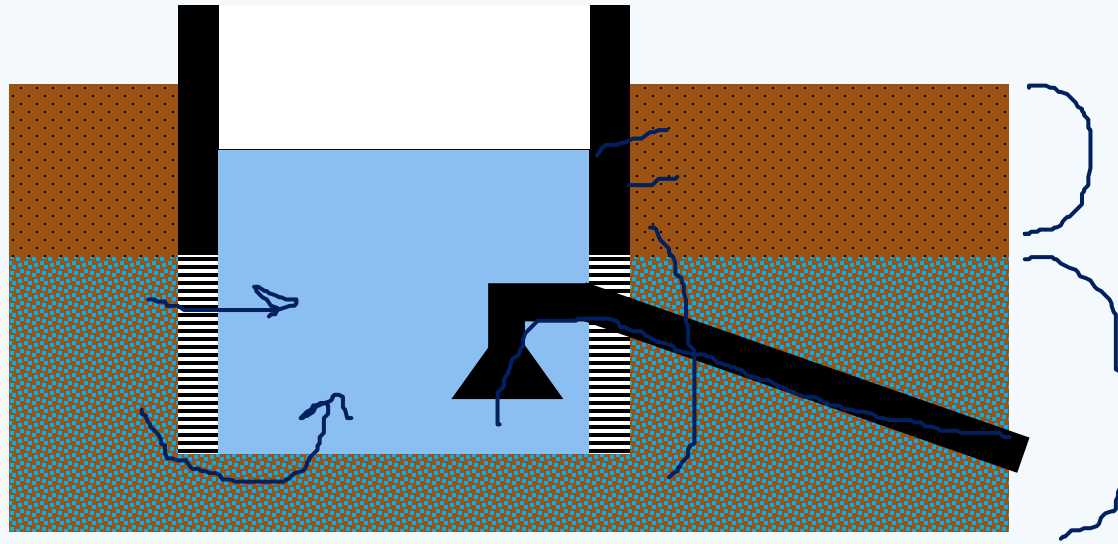


# Installing Hydrant





# Making the Catchment Tank





# Making the Catchment Tank





# Digging the hole







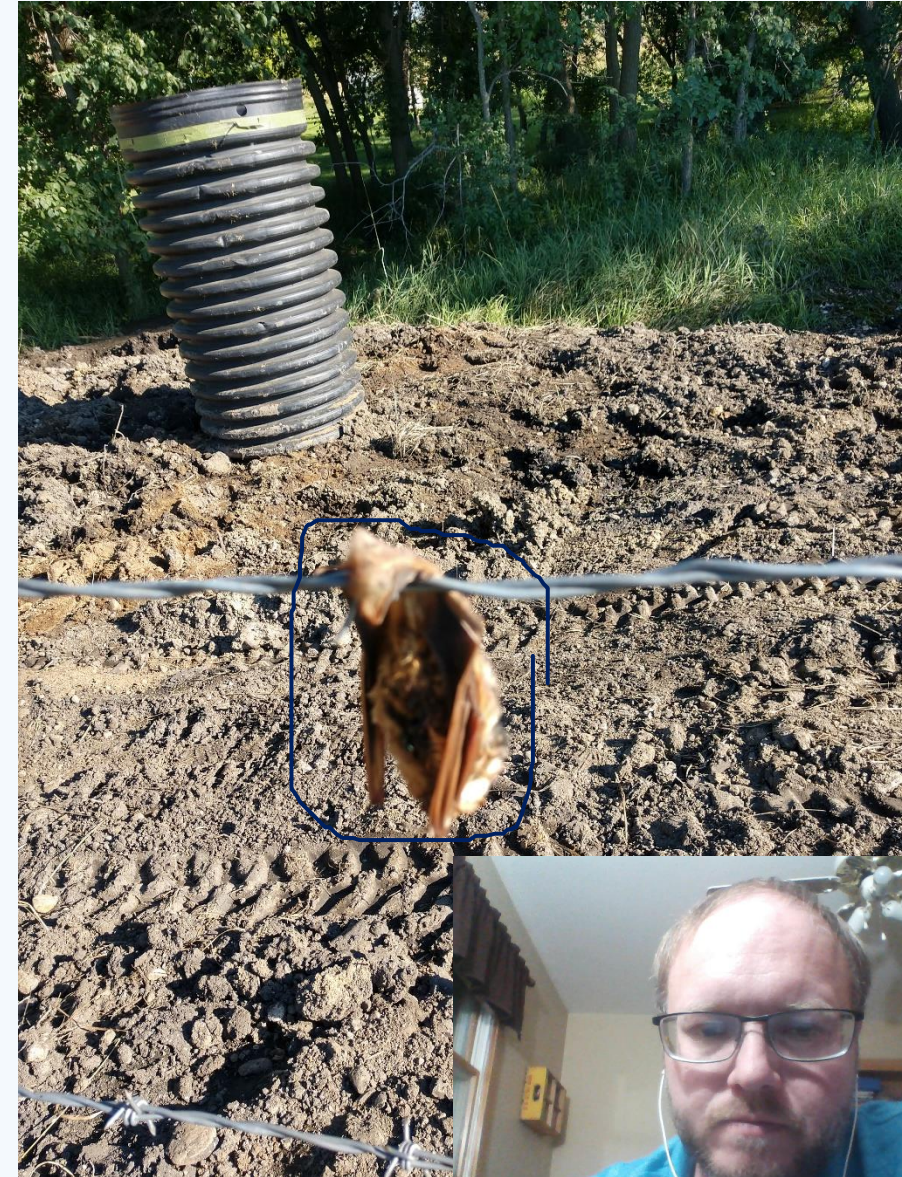


# Setting the Spring Box





# Setting the Spring Box





*Cutting it off*





# Cutting it off & Making the Lid





# Testing the system

5gal./min.



## Report Of Analysis

Date Received : 2020-07-24

Package Id : 20200724-016

20S007744

Description: Water

Date Collected:

Mutsch

Analyte

Result

Alkalinity

276.0 ppm

Electrical Conductivity (dS/m)

0.645 ds/m

Electrical Conductivity (umhos/cm)

645 umhos/cm

Hardness (including Ca & Mg)

325 ppm CaCO<sub>3</sub>

Iron

0.360 ppm

Manganese

0.0775 ppm

Nitrate-Nitrogen

13.900 mg/L

Sodium

4.08 ppm

Sodium meq/L

0.177 meq/L

Sulfate

ND ppm

ND Not Detected

