

# Van Duzen Elementary School TEAM



# Main Stem Van Duzen River



# Classifying Streams

Does it flow all year?  
The Van Duzen River  
is a federally  
designated wild and  
scenic river with no  
dams.

Does it flow all year  
round?



There are three  
classifications for  
flow.

Perennial

Intermittent

Ephemeral



# Classifying Streams

Does it flow all year?

Hely Creek is one of the few Van Duzen tributaries that run all year long.

It is considered to be a perennial stream.



# The Stream Flows sometimes.

Intermittent streams normally cease flowing for weeks or months each year.

Ephemeral streams flow only for hours or days following rainfall.

During unusually dry years, a normally perennial stream may cease flowing, becoming intermittent for days, weeks, or months depending on severity of the drought.



# Classifying water

Is it a run, a riffle, or a pool.

Define!



# Main Stem Van Duzen River





# Run, Riffle, or Pool



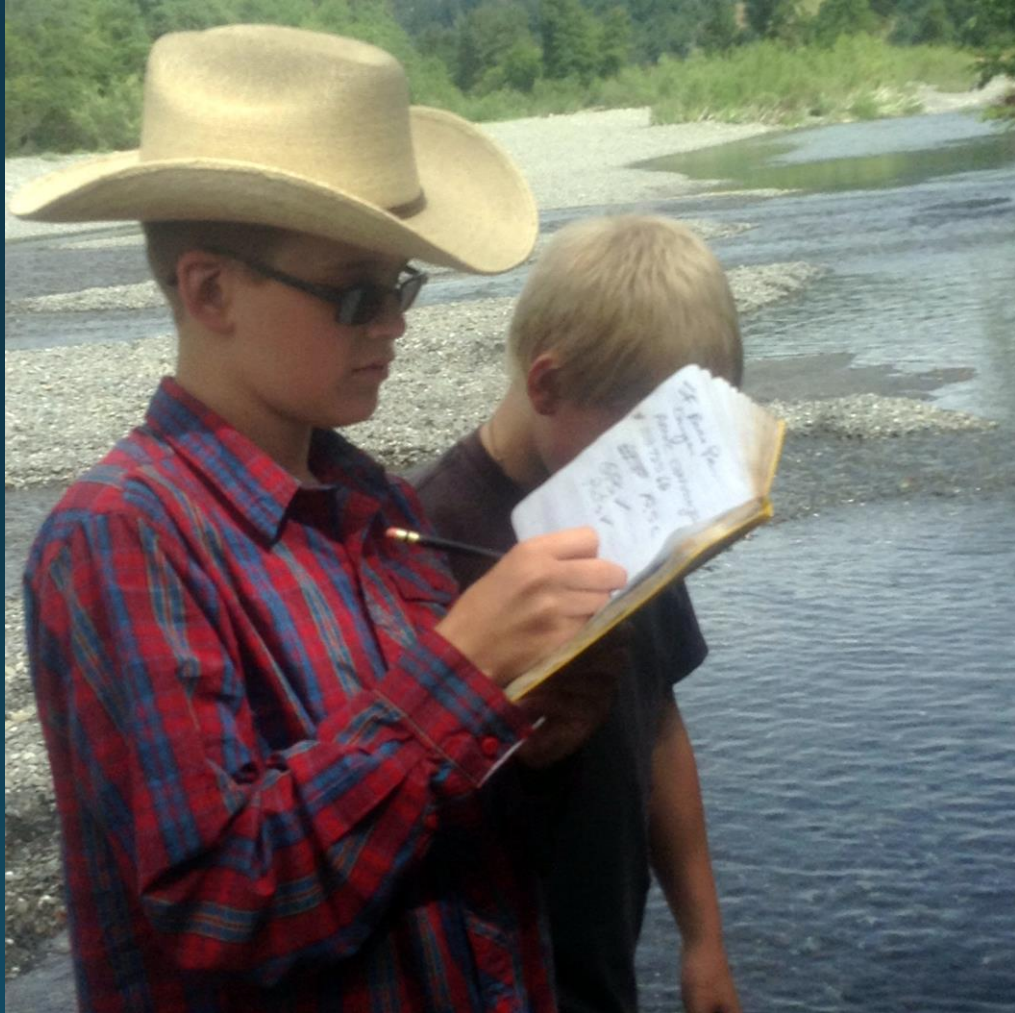
Where is the source of  
the Van Duzen River.



# Where does it end?



Kyle records data as Erica learns to record video from Pat.



# Dalten likes the depth probe



# Pat Higgins goes into the pool of water.



# Studying Macroinvertebrates











## What did we find?

Aquatic insect larvae were abundant but many were newly hatched and tiny.

We found seven species of mayflies.

We found six species of stoneflies.

We found four species of caddis flies

Lets take a look at these macroinvertebrates.

- What does this indicate for the health of the stream.
- Lets look at the different kinds in the next couple of slides and let fisheries biologist Pat Higgins explain what this means.

# Mayfly



# Stonefly



# Caddisfly



# D50

How does the D50 data collection work?

Why is it part of every good habitat study?

Why collect rock samples?

What does it tell us?



## Doing a D<sub>50</sub>

Measure the stream length at riffle.

Divide by 30

Take a rock at every interval

Measure the width

Take 30 counts

Find the median

Lets try with 5 random rocks.

- Our results indicated a median D<sub>50</sub> of 43.75
- Why is this important and what does this median mean?
- Lets check with Pat.



# Installing Hobo Water Temperature Pro v2 Onset Probes

Together with our TEAM of resource specialists, the Young Scientists placed 12 out of our 24 probes in the Van Duzen

Watershed in the summer of 2016.

Friends of the Van Duzen and Friends of the Eel have been installing probes for the past 4 years.

In the summer of 2015, for the 1<sup>st</sup> time, we retrieved 100% of our probes.

What happened to them?

We are hoping for a 100% retrieval rate in the summer of 2016.



# Putting in the Temperature Probe



