

# The Bubble-Up (WSDOT wetpond)



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# The Bubble-Up

**August 25, 2020**

- **Water Temperature:** 18.60°C
- **Dissolved Oxygen:** 9.28 mg/L, 101.0%
- **Spec. Conductivity:** 800.5  $\mu\text{S}/\text{cm}$
- **pH:** 8.07
- **Flow:** 0.70 CFS (measured at first berm from pipe)

**September 28, 2020**

- **Water Temperature:** 18.40°C
- **Dissolved Oxygen:** 9.45 mg/L, 100.9%
- **Spec. Conductivity:** 846.0  $\mu\text{S}/\text{cm}$
- **pH:** 8.08
- **Flow:** 0.64 CFS (measured at first berm from pipe)

# Yakima River @ USGS Van Giesen ( $\approx$ 4 miles upstream)

## August 25, 2020

- **Water Temperature:**  
Min= 22.4°C, Max= 24.6°C
- **Dissolved Oxygen (mg/L):**  
Min=12.8, Max= 16.2
- **Spec. Conductivity ( $\mu$ S/cm):**  
Min= 244, Max= 252
- **pH:** Min= 8.0, Max= 9.6

## September 28, 2020

- **Water Temperature:**  
Min= 15.7°C, Max= 17.1°C
- **Dissolved Oxygen (mg/L):**  
Min=9.0, Max= 12.7
- **Spec. Conductivity ( $\mu$ S/cm):**  
Min= 245, Max= 263
- **pH:** Min= 8.4, Max= 9.0

# Yakima River @ USGS Kiona ( $\approx 25.25$ miles upstream)

## August 25, 2020

- **Water Temperature:**  
Min= 21.6°C, Max= 23.9°C
- **Dissolved Oxygen (mg/L):**  
Min=6.1, Max= 13.5
- **Spec. Conductivity ( $\mu\text{S/cm}$ ):**  
Min= 225, Max= 240
- **pH:** Min= 8.0, Max= 9.2
- **NO<sub>3</sub><sup>-</sup>/NO<sub>2</sub><sup>-</sup> (mg/L):**  
Min= 0.90, Max= 0.96

## September 28, 2020

- **Water Temperature:**  
Min= 15.5°C, Max= 17.3°C
- **Dissolved Oxygen (mg/L):**  
Min=8.3, Max= 12.3
- **Spec. Conductivity ( $\mu\text{S/cm}$ ):**  
Min= 232, Max= 235
- **pH:** Min= 8.0, Max= 8.8
- **NO<sub>3</sub><sup>-</sup>/NO<sub>2</sub><sup>-</sup> (mg/L):**  
Min= 1.16, Max= 1.19

# Preliminary Bubble Up laboratory Results August 25<sup>th</sup> 2020

- 171 analytes tested for; pesticides, nutrients, TSS.
  - 12 herbicides detected
    - All detections at least 1/100 of aquatic life benchmarks
    - Highly soluble
  - 3 nutrient analytes
    - $\text{NO}_3^- + \text{NO}_2^-$  as N = 10.1 mg/L
    - Ortho-Phosphate = 0.0557 mg/L
  - 1 sampling event, not indicative of year round conditions
- 2,6-Dichlorobenzamide
  - Aminocyclopyrachlor
  - Atrazine
  - Bromacil
  - Desethylatrazine
  - Diuron
  - Hexazinone
  - Imazapyr
  - Norflurazon
  - Sulfentrazone
  - Sulfometuronmethyl
  - Triclopyr